

# Settlement and Landscape Transformations in the Amuq Valley, Hatay. A Long-Term Perspective

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## Introduction

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A decade of regional survey between 1995 and 2005 in the Amuq Valley in the Hatay province of southern Turkey (fig. 1), following seminal work done in the 1930s (Braidwood 1937), has produced extensive datasets to study the history of human occupation and landscape development in the region. The main insights from the work done by the Amuq Valley Regional Project (AVRP) have been presented recently by Casana and Wilkinson (2005a, in Yener 2005), with significant earlier publications including the University of Chicago dissertation by Jesse Casana (2003), and a multi-authored report on the 1995 to 1998 fieldwork seasons (Yener et al. 2000a). Particularly important results of the project concern the complex interplay between human settlement and environmental history in the later first millennium BCE and the first millennium CE.

These accomplishments of research and publication notwithstanding, ongoing research, including long-term excavation projects in the Amuq Valley at Tell Atchana and Tell Tayinat, continues to refine and alter our current understanding on many points, in particular concerning the Bronze and Iron Ages. There are good reasons, however, to present a synthesis at this point in time on the landscape and settlement history of the Amuq Valley, focusing on transformations in two separate periods, i.e. the pottery-Neolithic and Chalcolithic periods on the one hand, and the Hellenistic to Ottoman periods on the other. Our understanding of the nature and background of transformations in the settlement patterns in these periods has improved significantly in recent years. The current paper builds on the insights presented in said publications, but develops more detailed and differentiated models regarding the diachronic interactions between settlement, landscape, economy and society.

During both periods a significant proportion of the population in the region was spread out over many small dispersed settlements, whereas the Bronze Age and Iron Age settlement patterns were formed by tell-based, nucleated lifestyles. As a result of the methodological challenges of surveying mounded sites, ideally requiring multiple visits during different seasons to compensate for the relative scarcity of surface artefacts belonging to the earlier periods of occupation, the analysis of the settlement history of the Bronze Age and Iron Age has not yet proceeded to the same extent as that of the preceding and following periods.

It is becoming more common practice for survey based research projects in the Near East to incorporate those chronological periods that until fairly recently were considered to belong to separate domains of classical or medieval studies. But AVRP stands out in the degree to which it has developed an integrated landscape-archaeological perspective on developments from Neolithic to modern times. This perspective, also espoused by the authors of this article, combines an analysis of continuities and changes during particular chronological periods with studies of long-term structures and transformations. Archaeological, environmental and historical datasets are integrated to the extent feasible. The

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local stage, with particular attention for the interaction between human and environmental agencies, has to be understood within the regional and supra-regional historical scales at which political events and economic trends play out. To date, published archaeological syntheses of this nature are rare.

The final season of fieldwork of which the results are incorporated in this paper was carried out in the summer of 2005, under the direction of the first author. This post-dated the completion of the papers in Yener (2005). Work concentrated on the southeastern quadrant of the Amuq Plain, east of Demirköprü and south of Kumlu (fig. 2), and several goals were accomplished in the short, two week season. Nine new sites (AS 347 to AS 355, see the Appendix), mostly initially recognized on the CORONA imagery, were visited and collections were made at eight of them. The site database was further enhanced by enlarging the existing ceramic collections of about a dozen sites, in most cases leading to the discovery of previously unknown periods of occupation. Some questions were clarified regarding the localization of sites that had been visited and numbered by Braidwood's team in the 1930s, but not since. The Appendix to this article lists amendments and additions to the *Gazetteer of Archaeological Sites* (Casana and Wilkinson 2005b). The total number of sites which were examined by the Amuq Valley Regional Project and the authors of this study now numbers 287 (fig. 3). The majority of the remaining sites were recorded by Braidwood, but are in Syria or otherwise inaccessible to the project team. Finally and most importantly, analysis was completed of the ceramic collections of all sites recorded since 1995 for the periods considered in this paper.

The spelling of topographical names has changed regularly during the periods for which they can be inferred from textual sources in multiple languages. As long as it is clear which location is meant (e.g. Pagrae/Baghrās/Bakras), no attempt is made below to impose a single spelling. In other cases (e.g. Gephyra/Jisr Hadid/Demirköprü) multiple names are given whenever relevant.

## **Landscape and geo-archaeology of the Amuq Valley**

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The Amuq Valley (called also Plain of Antioch, presently Amik Ovası) lies to the northeast of the city of Antakya, ancient Antioch, in southern Turkey (fig. 3). At about 80-100 meters above sea level, it is a fertile and well-watered plain, about 40 km north-south and 35 km east-west in size (but becoming a much narrower valley in its northern reaches), separated from the Mediterranean by the high Amanus mountains and from the Syrian plains to the east by lower hill ranges. Several rivers flow into the Amuq Plain, the largest being the Orontes river coming from the south, the smaller Afrin and Kara Su streams entering from east and north. Until its drainage in the 1960s, the Lake of Antioch and surrounding wetlands in the central-western part of the plain collected the waters from Afrin and Kara Su before draining into the Orontes river not far upstream from Antakya. The Orontes leaves the plain towards the southwest, through a narrow valley in which Antakya is situated, and discharges into the Mediterranean a further 30 km downstream.

It would be superfluous to summarize the recent literature on the geo-archaeology of the region (cf. Casana 2003; Wilkinson 1997, 1999 and 2000; Wilkinson et al. 2001). However, some salient points need to be briefly presented, as they inform the current study in a fundamental way. A major transformation consists of a change from a tell-based settlement pattern with large and small nucleated settlements to a highly dispersed pattern of numerous small settlements (Casana and Wilkinson 2005a; Casana 2003). The evidence points to a date

for this transformation during the first millennium BC, largely completed already by the beginning of the Hellenistic Period. This transformation is all the more remarkable given the long-term stability of the preceding tell-based settlement system, which has prehistoric roots (for example Tell Kurdu, AS 94) but comes to full development in the Early Bronze Age. Accompanying the dispersal of settlement in the valley itself is a process of colonization of the uplands surrounding the Amuq Plain, in particular the hill regions to the south (Jebel al-Aqra). Bronze Age and Iron Age sites in these areas are scarce whereas dozens of small Roman and Late Roman sites dot the slopes of the same uplands. This process will be discussed in more detail below.

Observations of sedimentary sequences at numerous locations in the valley and uplands to the south have been very useful for building an understanding of the major environmental changes in the area itself (Wilkinson 2000; Casana & Wilkinson 2005a). In addition, palynological and palaeo-climatic records from other parts of the Levant help understand some of the broader regional trends (Casana 2003: 55-58). For the periods under consideration in this paper, two major processes of environmental change are important. There is strong evidence for extreme soil erosion from the hill slopes, and the aggradation of sediment in the valleys in the uplands and in parts of the Amuq Valley itself. Many examples have been recorded of deep sedimentary deposits overlying well-developed early or mid-Holocene soils. Later deposits often consist of coarser sediments than the earlier ones, indicating that deposition was from higher energy flows. Wherever information is available to date these phases of erosion, for example a field wall associated with Hellenistic pottery covered by six meters of coarse gravel observed in a section of gravel extraction pits at the foot of the Amanus mountains (Casana 2003: 73), it points to the early first millennium CE.

A second process that drastically changed the environment of the Amuq Valley is the expansion of the Lake of Antioch and surrounding marshlands. The lake was a prominent feature of the plain until the 1950s, but has not always been there. This has long been indicated by the existence of archaeological sites sitting as islands in the lake at the time of the initial survey by Robert Braidwood. Recording of sites within the former lake by the AVRP team dates their main phases of occupation to the Bronze Age, with small-scale inhabitation in the Iron Age and later (Wilkinson 1997; Casana and Wilkinson 2005b). Analysis of a core into the former lakebed, observations of beach ridges and the extension of lake sediments over archaeological features indicate that a major phase of lake and marsh expansion probably occurred in the mid to late first millennium CE. Marsh sediments cover systems of irrigation canals associated with Roman and Late Roman sites (Casana 2003: 65, fig. 2:12), with little or no evidence so far for occupation beyond the Early Islamic period. Mentions of the lake in historical sources suggest that there was a lake as early as the Hellenistic period, and confirm the presence of the lake as a major geographical feature in Roman and Islamic times (Wilkinson 1997; Casana 2003: 65-67; see below).

Wilkinson and Casana are careful in their work to emphasize that causal relationships are difficult to establish, but it is distinctly possible that the expansion of the lake has its origin in the extreme hillslope erosion, leading to sedimentation of rivers and canals and aggradation of the valley floor, resulting in poor drainage and flooding. The erosion processes themselves may well be related to the strong increase in human settlement and cultivation of the upland areas in the Hellenistic through Late Roman period (see below), presumably accompanied by deforestation and a destabilization of the physical landscape. In addition, increased storminess that occurred in the same period according to some palaeo-climatic data, would have come with episodic surges in runoff from the slopes, and may have contributed to the erosion.

## **The pre-Bronze Age periods**

*Rana Özbal*

This section does not intend to provide a comprehensive review of pre-Bronze Age settlements in the Amuq Valley but rather focuses on sites with prehistoric levels surveyed during the 2005 season. As mentioned in the introduction, the 2005 survey area was restricted to the southeast quadrant of the valley. Materials from the Amuq A through Amuq F Phases (and the related Amuq G Phase of the earliest Bronze Age) were found at ten of the twenty-eight sites visited during the season. When the Amuq F is not considered, however, this number does not exceed four.<sup>2</sup>

Given that the 2005 survey area encompassed the so-called “Çakaltepe sedimentary window” of very low alluviation since the early Holocene (cf. Wilkinson 2000), one finds a higher density of preserved prehistoric sites here than elsewhere in the valley. Despite the “window,” numbers of recorded sites are comparatively low (fig. 4); other prehistoric occupations presumably remain undetected underneath later occupation levels of tell sites.

In addition to the problem of finding and identifying prehistoric sites, we lack well-established typochronologies to refine local dark faced burnished ware assemblages. Painted wares with Halaf and Ubaid-like motifs inspired by supra-regional trends tend to be the main chronological markers. Recent excavations in the Rouj Basin to the south and sites to the north such as Yumuktepe provide comparative material which could help in refining the early Neolithic Amuqian plain wares (Balossi 2004a; 2004b; Iwasaki and Tsuneki 2003). Future research at a local Neolithic site is bound to bring definition to the existing chronologies and probably – given the El-Rouj sequence – yield earlier horizons and proof for the sorely missing pre-pottery levels. A thorough understanding of the plain wares is critical for the subsequent phases as well; the recent excavations at Tell Kurdu (Özbal et al. 2004; Yener et al. 2000a, 2000b), for example, indicate that 94-95 percent (by count) of the ceramics from the Amuq C Phase lack painted decoration (Diebold 2004; Özbal 2006). A re-examination of all prehistoric survey collections with the knowledge and expertise gained from the excavated ceramics is necessary.

### ***The Neolithic of the Amuq A-B Phases***

Sites yielding early pottery-Neolithic remains are rare, and in the 2005 season only one site dating to this phase was discovered. This brings the total number of sites in the Amuq Valley with Pottery Neolithic levels to eleven. Located south of the Çakaltepe sedimentary window, AS 349 was visited because an anomaly was noted on the satellite imagery. Site size estimates are difficult given the thick agricultural cover, but the mounded part of the site appears not to exceed two meters in height. No post-Neolithic ceramics were noted, and the present collection includes wares which can be assigned to the Amuq A Phase, although a few of the forms may continue into the Amuq B as well.

The two main ware categories found at AS 349 are those that typically dominate Amuq A assemblages: coarse simple wares and dark faced burnished wares. The coarse wares have dark cores and orange, somewhat friable surfaces, as is typical of the phase. Large ledge handles, like the one in figure 5.2, are among the shapes that exemplify the dark faced burnished ware sherds of the Amuq A and B phases. The assemblage also yielded an impressed sherd (fig. 5.4), as well as a number of lithic artifacts. The mentioned forms and

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<sup>2</sup> The Amuq A-B refers to the Pottery Neolithic. The Amuq C is the phase during which Halaf influences enter the local pottery assemblage. In the Amuq D and E, we begin to see Ubaid influences of the Middle Chalcolithic, while the Amuq F is a predominantly Late Chalcolithic assemblage.

wares all have simple lips and the majority is comprised of open shapes. Shape and ware parallels with the El-Rouj 2b assemblages are most notable.<sup>3</sup> Some shapes also appear at Mersin Yumuktepe in levels 29-26 (Balossi 2004a: 138). Following Balossi's designations, this site would probably correspond to a later part of the Amuq A assemblage, or what she calls Amuq A2, and possibly to the earliest beginnings of the Amuq B (Balossi 2004b).

### *The Amuq C Phase*

Interestingly, none of the sites visited during the 2005 season date to the Amuq C Phase.<sup>4</sup> In fact, this phase seems to be represented by fewer sites than other pre-Amuq F phases. This could be due to the fact that painted Halaf-like wares are rare and non-painted examples were not always recognized as belonging to the Amuq C Phase. Alternatively, although the exact processes remain elusive, Tell Kurdu (AS 94), estimated to have been 12-15 hectares in the Amuq C, may have drawn in much of the local population from smaller sites scattered across the valley. The entire site-area was probably not occupied simultaneously, but the fact that the overall size of the settlement exceeds all contemporaneous ones in the valley suggests that it was a central location of some importance. The discovery of other roughly contemporaneous settlements of similarly large size in the nearby provinces of Kahramanmaraş (Domuztepe; Campbell et al. 1999; Carter et al. 2003) and Urfa (Kazane Höyük; Bernbeck, Pollock and Coursey 1999) may indicate that the concept of large centers was not uncommon in this period.

### *The Chalcolithic of the Amuq D-E Phases*

Three sites dating to the Amuq D-E Phases were visited in 2005 (fig. 4): AS 135 (Tell esh-Sheikh), AS 168 (Karaca Khirbet Ali) and AS 97 (Tabarat Tarfah). The first two are significant because they figure prominently in the literature on discussions of the Amuq E Phase. While the existing survey collections for both sites were adequate, the visits allowed for clarification on the chronological issues central to the late prehistoric periods of the Amuq sequence; there has been a general disagreement among scholars about how these sites correspond to the Amuq E from Tell Kurdu. The third site, Tabarat Tarfah, not visited since 1937, is discussed at the end of the section.

Although the ceramics at Tell esh-Sheikh and Karaca Khirbet Ali fall within the general Amuq E range, some painted motifs and their manner of execution are distinctively different than those found at Tell Kurdu (see fig. 6; Braidwood and Braidwood 1960: 203-204; Woolley 1950: 64, also see French 1985: 266). Woolley assumes that the styles from Kurdu and Tell esh-Sheikh (AS 135) are contemporaneous and only show differences because the inhabitants of each settlement reinterpreted the general Ubaid theme in their own local way (1950: 64; French 1985: 266). The Braidwoods, on the other hand, are of the opinion that the Tell esh-Sheikh motifs represent a style that is a later or more mature variant of the typical Amuq E wares (Braidwood and Braidwood 1960: 204). Had examples of the full Tell esh-Sheikh ceramic sequence (including plain wares) from levels I through XII been published, the answer to this typo-chronological puzzle would probably be obvious.

Discussions to date (by Woolley, the Braidwoods and French) have justifiably focused on the differences between the Tell esh-Sheikh sherds and the Amuq E sequence best known from Kurdu, perhaps at the expense of similarities. However, one observation that can be made from the sherds collected at Tell esh-Sheikh during the 2005 survey season is the degree

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<sup>3</sup> Overlap with the subsequent 2c phase is evident for AS 93 (Iwasaki et al. 1995; e.g. fig. 5.5)

<sup>4</sup> Woolley (1950: 64) claims that "Tell Halaf painted wares" were found at Tell esh-Sheikh (AS 135) but too little is published to ascertain this statement. While the plain wares from the earlier phases do resemble Amuq C sherds, they could also be Amuq D in style.

of overlap (compare for example fig. 6.7 with Braidwood and Braidwood 1960: 191, fig. 148.22, fig. 6.9 with Braidwood and Braidwood 1960: 182, fig. 142.29). It is possible that these sherds, which were collected from a now highly bulldozed mound, chronologically correspond with the Amuq E of Kurdu, but only further research will be able to clarify this issue.

Another Amuq E site visited in 2005 was Karaca Khirbet Ali (AS 168), located not far from Judaidah along the foothills in the southeast part of the plain. Our observations confirm the idea that Karaca Khirbet material is a later manifestation of the Ubaid-related phase in the Amuq. Collections here noted a chronological difference between the upper and lower slopes of the hillside. The lower slopes yielded predominantly Late Amuq E materials (fig. 6.3, 6.6, 6.8, 6.10, and 6.12) that resemble wares and motifs known from Tell esh-Sheikh (AS 135, see French 1990: figs 3-4) and Tabara el Akrad Level VII (AS 182, see Hood 1951: fig. 6.1). Collection in the upper slopes was more difficult, due to intense cultivation, but here we see a low-rising mounded settlement with a mixture of Amuq E and later EBA materials.<sup>5</sup>

The final site with Amuq E occupation visited in 2005 is AS 97 (Tabarat Tarfah). This site was described by Robert Braidwood (1937: 30) as being a small mounded settlement, but at present not only has the mound been bulldozed completely flat but the höyük soils were removed by truck for use elsewhere. Collections here yielded Amuq E sherds which are closely in line both in terms of shape and motif with the Amuq E assemblage from Tell Kurdu. Typical also of the Kurdu assemblage, we find that the designs are applied using the multiple-brush style. Classic hatched chevrons and horizontal lines are also common (fig. 6.2, 6.4). In addition to the Amuq E assemblage, Tabarat Tarfah yielded sherds which are unmistakably Amuq F in form and temper (fig. 5.10, 5.11, 5.12, and 5.14).<sup>6</sup> Overall, the Late Chalcolithic shows a real break in ceramic traditions from the Amuq A-E, adding to the importance of understanding the Amuq E-F transition. Unfortunately, because the site is bulldozed, we have lost a rare opportunity to investigate the Amuq E to F transition here.

### *The Late Chalcolithic of the Amuq F*

There are a considerable number of sites that date to the Late Chalcolithic (fig. 7). In fact, more than half of the prehistoric sites visited in 2005 yielded ceramics dating to this period. Illustrated examples (see fig. 5.10-5.15) come from Tell Kirit (AS 172), Tabarat Tarfah (AS 97) and Büyük Ayrancı (AS 157). Hürriyet (AS 107), Tell al Far (AS 109) and AS 355 also yielded Amuq F ceramics. All are new additions to the site-gazetteer; they were either visited for the first time since the 1930s or were newly discovered in 2005.

Casana notes how the Amuq F brings with it a new settlement pattern (2003: 213). By the Amuq F we find numerous large sites in the central part of the plain. This he sees as contrasting with the smaller “shifting occupations” of the Neolithic and Chalcolithic. At 20 ha, Tell Imar (AS 101) with massive cut-stone constructions showing on the surface, is probably the largest Late Chalcolithic settlement, but, as noted by Casana, it is one of several

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<sup>5</sup> In the upper slopes we also discovered a few sherds that may pre-date the Late Amuq E Phase that could contribute to a further understanding of the site. For Karaca Khirbet Ali, the Braidwoods favor an interpretation that this settlement represents a “post-Kurdu manifestation of Phase E pottery decoration.... representing a late recrudescence of a decoration used in the previous Phase (D)” (1960: 204, also see 1960: 512) and propose that the inhabitants of the Late Amuq E Phase began to recopy old Amuq D styles in their motifs. An alternative possibility is an earlier phase of occupation, ultimately contributing to the presence of some of the earlier motifs, but further collections and excavations are necessary to confirm this tentative scenario.

<sup>6</sup> Because the Amuq E ceramics from Tabarat Tarfah appear close in style to the Amuq E from Tell Kurdu, and we believe that this represents an earlier stage of the Amuq E than Tell esh-Sheikh and Karaca Khirbet Ali, there may have been a hiatus of occupation between Phases E and F at Tabarat Tarfah.

other large sites dating to this phase, like Karacanlık (AS 92), AS 333 and probably Tell Karataş (AS 117) and Üçtepe (AS 108; Casana 2003: 213).

However, with six newly discovered small Amuq F sites in the 2005 season, and numerous other known small sites (fig. 7) the Late Chalcolithic is *also* characterized by an abundance of minor settlements. This is confirmed by a general look at the site-gazetteer (Casana and Wilkinson 2005b). It is also significant that many Late Chalcolithic settlements show no occupation prior to the Amuq F Phase (Casana 2003: 214). This pattern of numerous large centers as well as a number of smaller sites, most of which were newly founded, may be an indication for growing population densities in this period. However, the possibility that alluviation and other environmental and cultural factors have led to an under-representation of earlier sites cannot be discounted.

The Phase F wares collected during the 2005 season are from smaller sites and to a great extent are comprised of chaff-faced simple wares. Smooth-faced wares and wares with reserved decoration (e.g. Braidwood and Braidwood 1960: 229-233) were not noted. It would be worth investigating whether such wares only appear in larger central settlements. The best parallels in forms and wares come from the Qoueiq Valley (Mellaart 1981), Hama Level K (Ingholt 1934), although parallels in shapes from Kurban Höyük (Algaze 1991), Hacinebi Tepe (Pearce 2000, Pollock and Coursey 1995), Kenan Tepe (Creekmore 2007) and Leilan (Schwartz 1988) are also notable.

### ***Discussion: prehistoric settlement patterns***

If the currently known pre-Bronze Age sites are to some degree a representative sample, a hypothetical development of prehistoric settlement patterns can be proposed. During the Amuq A and B Phase, there was dispersed occupation of the valley in small sized settlements. It is possible that there was a certain degree of clustering during the Amuq C Phase, with fewer small settlements, and a significant proportion of the valley population at the large site of Tell Kurdu (AS 94). Yet this observation must be considered tentative because the survey assemblage needs to be reexamined with a better typo-chronological understanding of the non-painted wares. A re-dispersal seems to have taken place by the Amuq E (or possibly already by the Amuq D). Tell Kurdu remains inhabited, but as a much smaller settlement than before. In the Amuq F period, a distribution of both large and small sites indicates a growing overall population.

Unlike the later periods covered by this article, we lack the ability to discuss the distribution of prehistoric settlements over different environmental zones. Prehistoric sites are concentrated across the valley floor and are largely absent from the foothills encircling the plain (fig. 4, 7). To date, only four prehistoric non-valley-floor sites have been discovered. Even though the evidence is meager, these sites suggest that the uplands were exploited, if not actually inhabited in prehistory as well. Hillslope erosion and soil deposition in the upland valleys negatively affect the possibilities to document prehistoric occupations in for example the Jebel al-Aqra region.

The earliest prehistoric remains from an upland site probably come from AS 26, (Ada Tepe), located on a low hill to the northwest of the plain (fig. 5.3, 5.9). The data remain sparse, but Ada Tepe was probably inhabited in the early pottery-Neolithic phases. Occupation may also have continued into the Amuq C Phase, but no painted Halafian type ceramics were found. Upland occupation for the Amuq E Phase is better represented by AS 168 (Karaca Khirbet Ali) and AS 246 (Çakallı Karakol). The former site, discussed above, lies on a limestone outcrop overlooking the Afrin Valley. Perhaps more remarkable, Çakallı Karakol is strategically located within the Belen Pass, which connects the Mediterranean Sea to the Amuq Plain. The discovery of prehistoric levels at this site indicates that this mountain

pass functioned as a trade and travel route long before the periods discussed in the following sections of this article. Occupation of highland pastures, passes and other upland locations likely continued into the subsequent Amuq F Phase of the Late Chalcolithic. Although currently represented by a single example, AS 238 (Serinyol Kale), this settlement may point to the presence of other yet-to-be-discovered foothill sites dating to the Late Chalcolithic.

## **The Hellenistic Period (3rd to 1st century BCE)**

*Andrea De Giorgi*

The dangers of overemphasizing the role played by provincial capitals and ancient *megalopoleis* on their respective territories are well known, and the AVRPs survey sampling strategy and field approach were designed to offset this potential bias. It is clear, nevertheless, that settlement in the Amuq Valley during the Hellenistic and Roman eras was dynamically linked with Antioch's urban, political and economic developments. On the one hand, this perspective enabled us to amply draw from a considerable body of textual sources, thus being able to historicize the archaeological data and offer interpretative frameworks about the dynamics that shaped the valley starting in the Late Hellenistic period. On the other hand, the problematic nature of Antioch's archaeological information presented a formidable challenge (De Giorgi 2007). Hitherto unknown, Antioch's urban system had to be understood on the basis of the abundant archaeological record retrieved by the AVRPs in the city's hinterlands and chora.

Our research proceeded in three stages. (1) The archaeological survey was particularly effective in investigating the landscape and documenting the existence of settlements, industries, and road networks on which Antioch depended for its sustenance and the realization of its economic potential. (2) The study of the artifacts collected in the survey, primarily pottery, enabled us to provide each of these sites with a firm chronology, while Geographic Information Systems (GIS) facilitated the analysis of their settings and interconnections. (3) This evidence was subsequently studied against the background of the legal and political forces that shaped the Seleucid kingdom and later, the province of Roman Syria in Roman times. Rural and city markets, agricultural strategies, and the exploitation of varied resources were placed in their proper historical contexts.

Founded in 300 BCE by Seleukos Nikator, Antioch was neither the outcome of a Macedonian military settlement, nor the re-foundation of an already existing urban milieu (Downey 1961, 67-82). According to myth, the Seleucid king founded the city on the 22nd of Artemisius (May) to honor the memory of his father Antiochus (Jus. 15.4.7-8.). The city was built on a site where there had been favorable omens, likely in the southern sector of the future Roman city (Will 1997, 99-101). In addition, the entire population of near-by Antigonía was forcibly relocated to Antioch; the former, founded by Antigonos in 306 BCE, allegedly ceased to exist shortly afterwards.<sup>7</sup> While Seleucid urbanism and politics in Asia Minor are well documented, the same cannot be inferred for northern Syria and Antioch. Frustrated by a lack of inscriptions and monuments, the AVRPs research nonetheless took into account the centrality of the region that the textual sources accord, especially at the time of Antiochos III, as Polybios suggests (Ma 1999, 7-8).

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<sup>7</sup> The exact location of Antigonía is a thorny subject. Diodorus Siculus contends that the city was '*well situated to watch Babylonia and the upper satrapies, and also lower Syria and the provinces as far as Egypt*', Diod. 20. 47. A suggestive allusion by Dio Cassius, however, might imply the town's location in the Amanus Mountains: see D.C. 40.29.



The AVRPP data suggest that Antioch produced a dense network of sites, with a concentration in the central Amuq Valley (fig. 8), with a peak in numbers during the 2nd c. BCE, a phenomenon that parallels the growth of Antioch at this time (Strab. 16, 2, 4). How this settlement shaped the central Amuq Plain, the Amanus Mountains, and the limestone hills of the Jebel al-Aqra is the subject of this section. Probably on account of its fertility, the central Amuq Plain drew dense settlement activity as early as the beginning of the 3rd c. BCE. It can be safely argued that these early communities, most likely colonies promoted by the central government (see below), seized the most profitable and easy to exploit regions according to a scheme that placed more emphasis on the quality of the soil rather than on vicinity to the city.

All in all, hierarchy of settlement and site dispersal are the trends that the archaeological record brings into focus. Most sites can be safely interpreted as small farmsteads, being rather non-descript and small in size (under one hectare). A prime example of a hierarchical settlement pattern can be seen at AS 254, a large site on the broad, central silt plain of the Afrin. Measuring some 9 ha., it consisted of two main areas of occupation and featured ashlar blocks related to monumental construction of an unknown nature. It was densely inhabited from the 3rd century BCE onwards, as fragments of black glaze *kantharoi* demonstrate. Many of the ceramics collected date to the 2nd century BCE, with a predominance of bowls with incurved rims slipped in brown, red and black (fig. 9 shows Hellenistic ceramics from various Amuq sites). Various fish-plates of Antioch type I, 17 also support this chronological framework. AS 254 was surrounded by a system of four very small farms all measuring less than one hectare. The same types of ceramics, from black glaze ware to fish-plates and early Megarian bowls, were found at each of these sites. This settlement scheme of a center with smaller satellite sites was replicated by AS 108 and quite possibly by other sites.

Not all sites recorded in the central plain, however, are incorporated in hierarchical configurations. Other nucleations that were occupied in the late 3rd-early 2nd century BCE measure less than one hectare, and represent a more dispersed pattern of occupation. These sites were plausibly the result of the seizing of more marginal and less productive pockets of land. The expansion of the Lake of Antioch and its system of marshes, at this time in particular, played an important role in determining niches that were available for occupation and cultivation. Small sites such as AS 75, AS 180, and AS 181 were in all likelihood farms that began in the late 3rd century BCE. Despite the typical settlement continuity of most sites in the Amuq Valley,<sup>8</sup> these were particularly short-lived: fishplates of the early 1st c. BCE and early Eastern Sigillata A (ESA) vessels represent the youngest forms before abandonment. Within a few generations they were either surrounded by marshes (AS 75) or submerged (AS 74, AS 180, AS 181).

Hellenistic period Tell Judeidah (AS 176) and Üç Tepe (AS 108) in the eastern sector of the plain, each measuring approximately two hectares in size, are exceptional in being situated on top of ancient mounds in the plain. Early Megarian bowls, Pergamene wares, and brown/red-slipped wares are well represented among the abundance of collected materials (Friedman/Reichel 1995, 67-70).

A distinctive aspect of Hellenistic settlement in the Amuq Valley is the first appearance of sites in the highlands. In the Jebel al-Aqra a few small sites along the slopes of the Tanışma Valley were identified. Plow-induced erosion has dramatically modified this ecosystem, making the study of the ancient landscape difficult. Nevertheless, traces of terracing suggest that settlers were looking into the agricultural opportunities that this district offered as early as the 2nd century BCE. Initially on a small scale, this occupation was

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<sup>8</sup> 91% of the Hellenistic sites recorded by the AVRPP witnessed occupation during the Roman period.

conceivably a response to the demographic growth experienced by Antioch at that very time.<sup>9</sup> The character of this settlement was to remain basically unchanged for almost two centuries. Terraced orchards, vineyards, and possibly olive groves were the ideal forms of cultivation in this area, considering the general water and soil conditions of the district.

The picture of Hellenistic settlement in the Amanus Mountains, although consisting of no more than a scant number of sites, merits attention because of the peculiarities that it presents. One or possibly two urban foci date to the 3rd century BCE. The questions remain unresolved whether these foci functioned as independent towns and had their own charters, and what type of relationship they had with Antioch. AS 248, though obscured by the modern village of Bakras and an Ottoman caravanserai (see the Late Islamic section below), can be plausibly identified with the ancient town of Pagrae. This city was cited by Strabo (16.2.8) as being instrumental in controlling the traffic through the Amanus Mountains along the route that connected Antioch to Alexandria ad Issos (fig. 10). The ceramic finds, as well as various coins of the Seleucid and Ptolemaic kingdoms, agree with a Hellenistic foundation for the site. AS 273 to the north is a vast nucleation (350 x 400 m) in the vicinity of the modern village of Ceylanlı. The site is crowned by substantial Roman architectural remains, including a monumental necropolis and traces of an urban grid. Nevertheless, the pottery evidence indicates that the occupation at the site dwindled around the end of the 1st century BCE and ended by the mid-1st century CE. That this was the result of a new settlement further to the north, part of Roman Meleagrum, will be seen below.

### ***Discussion: the Hellenistic Period***

In sum, a dispersed settlement pattern, site-hierarchy and the emergence of a web of small urban foci (Pagrae, and until 300 BCE Antigonia) are the most tangible trends as they appear in the archaeological record. The central Amuq plain drew most of the occupation dynamics during this era.

Although traumatic for the Seleucid state, the loss of Asia Minor in the aftermath of the battle of Magnesia (190 BCE) and that of Mesopotamia thereafter may be regarded as the prime factors for the rise to preeminence of Antioch's town and country in the 2nd c. BCE (Sève 2004). Now dominating a kingdom that consisted of northern Syria alone, the city, hitherto just one of the kingdom's capitals, drew settlers relocating from the lost Seleucid districts. The loss of Asia Minor, in particular, may have directed a flow of military units and veterans into Antioch's territory, thus significantly impacting the rural districts. The Seleucid policies of colonization are well known.<sup>10</sup> Institutionalized schemes allocated land to veterans from which it could extract taxation and thus feed the coffers of the Seleucid state. Moreover, this would effectively deploy discharged veterans in order to enhance control over sensitive areas (Bar-Kochva 1976). With the army constantly on the move, veteran settlement provided expedient means to exert control. Even though concrete evidence such as inscriptions is lacking, it is quite possible that the appearance of dense settlement in the central Amuq plain has to be associated with schemes of veteran settlement.

## **The Roman Period (1st century BCE – 3rd century CE)**

*Andrea De Giorgi*

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<sup>9</sup> The city especially flourished under the kingdom of Antiochus IV Epiphanes (175-163 BCE) (Downey 1961, 55-63).

<sup>10</sup> Sardis at the time of Antiochos III and the system of colonies that the city engendered is illuminating in this sense. See *SEG* 39.1289.

For the Roman Period the AVRPP has been able to document with special clarity the continuity of settlement between the late Hellenistic and the Early Roman phases, together with a sharp increase of rural settlement. Continuity of settlement between the late Hellenistic and the Early Roman phases and the establishment of many new settlements are the most apparent trends. Of a total of 287 sites that were studied, 205 were inhabited in the Early Roman period; 35 % of these were pre-Roman foundations. The impact of the Roman administration on this landscape did not alter the pre-existing royal land systems, leaving the administrative configuration of this region intact. Independent villages and communities (*komai*) that had hitherto exploited this landscape experienced changes only at a purely fiscal level, with the introduction of the census and thus of a more systematic taxation system. What changed, however, was the city's preeminence. Major political and physical changes took place as early as the time of Julius Caesar, when Antioch was granted *libertas*, and a series of ambitious building programs was begun (Downey 1961, 154; Malalas 216.15-17). The AVRPP survey, in documenting the simultaneous emergence of new settlement in Antioch's rural districts at this time, shows that the growth of the city went hand in hand with that of the countryside (fig. 11). It also demonstrated the distinct emergence of lesser towns that were to figure prominently in the 1st and 2nd centuries CE and further into Late Antiquity, namely Gephyra (AS 297), Pagrae (AS 248),<sup>11</sup> Meleagrum (AS 273) and Imma (AS 345) (fig. 10). Growth of settlement was the hallmark of the region, and no breaks in the occupation can be detected in the archaeological record. The 3rd century CE (Duncan Jones 2004), with Sasanian raids and famines, did not produce visible alterations to the settlement schemes in the valley.

In the course of the survey it has become apparent that the expansion of the lake, along with flooding of the Orontes, Afrin and Kara Su rivers, shaped the responses of human agencies in the plain in antiquity (see the introduction). Overall settlement in the plain depended on two other factors as well: the fertility of the land, and access to the main arteries of traffic.

### ***The southern area of the Amuq Valley and the Imma region***

Convenient access to the city was presumably the rationale behind the location of sites like AS 226, AS 229, AS 84 and especially AS 227, as they are situated halfway between the city and the valleys cutting through the Jebel al-Aqra.<sup>12</sup> The Antioch-Beroea-Chalcis route (fig. 10) that runs parallel to the left bank of the Orontes offered an additional opportunity for settlement and made this narrow but fertile district an attractive one. This important artery of traffic extended one of the urban thoroughfares to serve a network of routes all over Syria. Through its many manifestations, the continued all the way to the Euphrates frontier. A few stretches of this road survive in the research area; in the 1930's, Braidwood recorded that a portion of the route extended through the vicinity of Tell Keles (AS 124) in the eastern sector of the Amuq Valley (Braidwood 1937, 40; cf. Poidebard 1929, 22-29), while the AVRPP could trace a few surviving meters in the vicinity of site AS 202, near the Syrian border. At the town of Gephyra, modern Demirköprü (AS 297), a bridge was built perhaps shortly after the creation of Provincia Syria. At this time large contingents of troops were deployed from Antioch to various locations in southern Syria to deal with the continuous strife of the second half of the 1st century BCE. In these terms, the network of roads intersecting the plain and linking Antioch to the rest of Syria, along with riverine transport on the Orontes, was instrumental in integrating the different communities within this enlarged "suburban" system

<sup>11</sup> Possibly AS 246, see the discussion on Pagrae/Baghrās in the Early Islamic section.

<sup>12</sup> Figuring prominently in the Orontes basin is AS 227, modern Sultan Merkezi, a complex that included a heavily bulldozed monumental building on the mounded sector of the site and a beautifully preserved overshot watermill.

and providing access to urban markets. Thus a symbiotic relationship formed in which the rapid growth of the city was accompanied by the expansion of its hinterlands starting at the time of the *Pax Romana*. It sustained urban communities and military contingents alike by ensuring a constant supply of perishables and cereals to the capital. Libanius' description of the daily flow of farmers into the city of Antioch vividly depicts the terms of this town and country relationship (Lib. *Or.* 1.26).

The southern area of the central Amuq Valley presents a number of sites oriented to the movement of traffic along the main road that thereby had easy access to Antioch and the rest of Syria (AS 203, 251, 122, 124, 202) follow this rationale. No material predating the Early Roman phase was present in these units, and they would thus be contemporary with the paved road. The sites in question, however, invariably represent very small occupations, perhaps small farms or simple seasonal encampments, with only a scant amount of fine wares, and a higher incidence of mortaria, amphorae, storage jars fragments and plain wares in general. Scanty ESA fragments datable to the early 1st century CE also support the chronology of these assemblages.

Two sites linked by a water infrastructure were recorded by the AVRPP along the road to Beorea and Chalcis, AS 202 and AS 345, ancient Imma (modern Yenisehir). The town of Imma owes its fame to the final battle between Aurelian and Zenobia in 274 CE (Downey 1950), a time when the town was embellished by large scale public buildings, at least judging by the size and quality of *spolia* that are embedded in various modern buildings. AS 202 is an above average-sized site measuring 300 x 150 m and is located on the eroded slopes of the limestone plateau. Although a concentration of ceramics and several rock-cut tombs were recorded by the AVRPP in the area, the feature that draws the most interest is a well preserved system of watermills, reservoirs and canals that lie to the immediate south of the settlement. The reservoir in nearby Imma, 300 m to the south of the town, fed a canal that ran across the plateau, brought water to a cistern and thence continued to the watermills located on the western slope of the plateau itself (cf. Casana and Wilkinson 2005a, fig. 2.30). Adjacent to the canal is AS 347, yielding a vast array of materials dating to the 1st and 2nd c. CE and plausibly related to Imma's enlargement at this time. It is likely that a small center like Imma stimulated new settlement in its environs by virtue of its favorable location on the northern fringes of the limestone plateaus and access to the main artery of traffic.

The settlement density of the district of Imma in the High Roman Empire is confirmed by occupation of the highland region south of the town in Syria, where several sites were investigated previously by Tchalenko (1953, 92). These include a temple dedicated to Zeus Bomos, and several cemeteries characterized by monumental shrines; especially noteworthy are several sarcophagi bearing Greek inscriptions that refer to wealthy 2nd century CE landowners with Roman, Semitic, Aramean and Greek names (Tchalenko 1953: 21-28). Tchalenko's data corroborate the picture of a region that became a new settlement focus in the 2nd century CE in response to environmental contingencies as well as economic stimuli provided by the city of Antioch. In particular, the expansion of the lake and its marshes apparently precluded new settlement in the plain and stimulated the occupation of the virtually hitherto unexploited highlands. The analysis of the Jebel al-Aqra below, however, will treat the issue in more detail.

### ***The central Amuq Valley and the Afrin river***

Northeast of Antioch, one enters the most fertile and the most densely occupied area of the district, which consists of the Orontes alluvial fan located between the Orontes and the Afrin Rivers. Two main settlement patterns can be observed during the Roman Period: (1) the installation of new farms between the late 1st c. BCE and the 1st c. CE, and (2) the

consolidation of pre-existing units. Settlement in this area witnessed dense occupation in the early 1st c. CE, probably on account of the fertility of the land, and, importantly, the lesser susceptibility to floods than other parts of the valley floor. Most pre-existing sites survived the impact of new farms and estates. However, the territory that each community had at its disposal was reduced, while interstices of land hitherto left unexploited were occupied by new settlers. This scheme can clearly be seen at work within a discrete group of sites immediately east of the Orontes River. AS 249 and 138 are two small Hellenistic farmsteads that originally had access to a significant stretch of territory. At the beginning of the 1st century CE, three new farms were created: AS 139, 222 and 250. These significantly curtailed the land holdings of the previous farms that remained in operation. The abundance of diagnostic ESA at these sites points to mid-1st century CE occupations of the new sites. Interestingly, however, the location of AS 250 did not turn out to be a favorable one; Corona imagery and survey have revealed the presence of a sinuous canal reflecting one of the many fluctuations of the Orontes riverbed, which ultimately led to the burial of the site. The materials recovered from it cannot be dated later than the mid-1st century CE.

The Afrin river area witnessed dense settlement activity in the Early Roman Period. In particular, a branch of the river was diverted by means of a canal (2.5 km long) that served a series of villages and communities. Sites situated alongside the canal (AS 167, 168, 169, and 171) range between the mid-1st century BCE (based on ESA wares of Hayes' type 22), and the 2nd century CE (Eastern Sigillata B (ESB) fragments and later ESA forms, like Hayes' type 40) (fig. 12 shows Roman period ceramics from various Amuq sites). Although they measure under one hectare in area and are invariably situated on low hills or mounds overlooking the valley, these sites present an interesting spectrum of ceramics, that circulated in the Amuq Valley in limited quantities. Furthermore, AS 163, although obscured by a modern cemetery, had remains of monumental buildings consisting of column drums, ashlar blocks still in situ and a Doric capital. Heavily bulldozed and rather small in size (100 x 120 m), the site occupied a mound and presents a ceramic assemblage that begins with finds dating to the late 1st century BCE and that continue throughout the 1st-2nd century CE (various ESA forms: Hayes' types 26, 53, 65, as well as ESB: Hayes' type 18). Interestingly, no materials post-date the 2nd century CE, a date which may suggest the end of activities in this area since it is a phenomenon that applies to other sites as well.

While the canal served the purpose of increasing the volume of water carried by the northernmost (C) branch of the Afrin River, the middle (B) course of the same river remained active at the time of the Early Roman Empire, as the location of several sites indicates. In particular, sites AS 45, 46, 54, and 151 conform to the same patterns delineated above: that of small mounded sites, less than one hectare, that were occupied between the late 1st century BCE and the late 2nd century CE. While it is difficult to determine their character and topography, they do represent a settlement formula that was rooted in the Afrin Valley, consisting of small units that exploited ample parcels of land for cultivation.

The aggregate archaeological evidence suggests that, rather than dwindling on account of the impact of the Roman administration during the 1st century CE, the occupation seems to have grown even stronger. No signs of retrenchment were detected by the AVRPP; to the contrary, most sites were consolidated and their communities enlarged. AS 108, Üç Tepe, is the site that best exemplifies this phenomenon. A trilobate mound, the site accommodated a substantial community from the 3rd century BCE down into the Late Hellenistic era. On the basis of the archaeological data (early ESA bowls like Hayes' type 22a, Hayes' type 17 and 'thin wall' wares of Augustan date), it can be inferred that the northern lobe was first occupied in the 1st century CE, thus creating an extension to the previous nucleation. Later

wares (ESA Hayes' types 54 and 65 among others) confirm the continued occupation of the site during the 2nd century CE.

### ***The Amanus Mountains***

Semi-intensive pedestrian transects were conducted by the AVRPP in the Amanus Mountains in the seasons of 2001 and 2002. Occupation patterns can be summarized by three dominating trends: (1) in the valleys cutting through the Amanus Mountains; (2) on the Amanus piedmont, overlooking the Antioch-Germanicia-Nicopolis road; and (3) isolated high altitude sites, possible summer retreats.

In the Bakras area, first settled around the 1st c. CE and continuing into the Islamic era, sites display two location trends. They are either on the piedmont and oriented toward the plain, or they are in the passes that connect the Amuq plain to the Cilician coast. A site of considerable size, AS 246 (280 x 150 m), is located in the vicinity of the modern village of Belen on a limestone hill overlooking the road. The majority of the ceramics offer a wide spectrum of vessels and wares of the 1st and 2nd centuries CE (ESA cups Hayes' type 18 and Hayes' types 37a and 48). These same characteristics are shared by a group of smaller sites, AS 331, 245, and 244 respectively. Measuring an average of 50 m<sup>2</sup>, these units are among the smallest in the Amuq Valley and typify the settlement pattern that occurred on the lower slopes, with easy access to important routes and terraced land holdings for the maintenance of these communities.

The Kırıkhan valley, although cursorily examined, exhibits settlement trends that run counter to the patterns thus far delineated. Two sites out of the three identified in this valley, AS 336, likely a shrine, and AS 334, are situated at the considerable altitudes of 909 and 960 m above sea level, respectively. They occupy rocky plateaus above the elevation of olive cultivation, where the only vegetation consists of maquis and sporadic nut trees. Traces of terracing are prominent on these highlands and bespeak the tenacity of communities that carved pockets of land out of an extremely rocky terrain with just a few centimeters of topsoil. But there is more here than meets the eye. AS 334, Karacaoluk Yaylası, still exhibits a grid-like pattern to which various buildings conform, to the point that they can be virtually reconstructed. The ceramic assemblages are also noteworthy; while pottery of the early 2nd century BCE was found, the bulk of the ceramics dates to the 1st and 2nd centuries CE, with a good selection of ESA and ESB wares. If the presence of ESB sherds is surprising in itself, a fragment of Italian Sigillata (Dragendorff 16) raises questions about the nature of this specific settlement. Single pottery fragments of course do not authorize substantial conclusions. In this case, however, it seems plausible that AS 334 did not fit the typical farmstead scheme; both the ceramics and the quality of the buildings suggest the presence of a possible seasonal retreat for use during the hottest months of the year.

The topographical/archaeological implications of the Ceylanlı Valley were amply discussed elsewhere (De Giorgi 2007) but some facts about this area need to be underscored. First, the emergence of a seemingly large new site AS 287 around the 1st c. BCE is noteworthy. Entirely obscured by the modern village of Ceylanlı, and plausibly identified with Meleagrum it gradually absorbed other communities located on the piedmont, such as AS 273, where the latest materials consist of ARS fragments of the 3rd century CE. Situated in the surroundings of AS 287 are a necropolis (AS 273) and a shrine (AS 272). Consisting of a scatter of sarcophagi and monumental tombs still visible in the 1930's, the necropolis is today attested by the rock-cut tombs of the so-called "Five Brothers". It is dated to the mid 2nd c. CE by an inscription that includes an imprecation (Chapot 1902). The complex of three chambers is topped by a rock carved relief representing five mantled figures.

### ***The Kara Su valley***

The development of the Antioch-Nicopolis-Samosata road (fig. 10) was crucial for the development of settlement in the northern Amuq Plain. Elusively occupied in the Hellenistic Period, new settlement at the time of the Early Roman Empire was in all likelihood the result of the economic opportunities presented by an artery of heavy traffic traveled primarily by the military. The road was critical for the rapid deployment of Syrian legions in response to Parthian and Sasanian incursions. In this light, the installation at AS 190 of a small fort of approximately square plan, measuring 64x64 m, is fitting.<sup>13</sup> To be interpreted as a *castellum*, its presence must be connected with the nearby road. The annexation of Commagene under the Flavians is the *conditio sine qua non* for the implementation of these military logistics, and thus one can plausibly infer that the fortlet was part of the scheme. The archaeological record at the site indicates occupation that continues into the Late Roman and Early Islamic periods.

In more general terms, it must be underscored that the first classical period settlements in the Kara Su valley had appeared during the middle Hellenistic period. Boz Höyük (AS 4) on the floodplain was first occupied in the 2nd century BCE, measuring less than one hectare in area. Around this Hellenistic enclave a much larger community expanded over the site starting in the early 1st century CE and continued into the 2nd century. The pattern at Boz Höyük was replicated by two more sites on a prominent mound in the Kara Su flood plain, respectively AS 7 and 8, which revealed the same type of occupation continuum on a smaller scale. AS 8, near modern Arpalı, exhibited fragments of stone columns in addition to a typical scatter of tiles and sherds. These sites invariably display a tendency towards the reoccupation of mounds and higher ground settlement, probably in response to the fluctuations of the course of the Kara Su River. Most sites east of the Kara Su exhibit a continuum of use that extends into the Late Roman period.

### ***The Jebel al-Aqra region***

The affinities between the material culture and settlement dynamics of the Amuq region and those of the Syrian limestone *massifs* become more tangible once one enters the landscape of the Jebel al-Aqra and the limestone highlands southeast of Antioch (Butler 1929; Tchalenko 1953; Tate 1992). Here, settlement during the early 1st century CE was the result of a combination of emerging economic opportunities and institutional schemes for the discharge of veterans (De Giorgi 2007). On these dry, deeply eroded limestone hills, the archaeological survey unexpectedly recorded the highest site density. To account for the phenomenon two factors must be taken into consideration. First, systematic settlement in the area began in the late 1st century CE; previous occupation of this difficult terrain was slight (see above). Second, fragments of stone olive crushers and presses and were scattered in noteworthy quantities, suggesting the presence of an olive oil industry. The drought-like conditions of the Jebel al-Aqra, the westernmost extension of the system of the Syrian Jebels, were ideally suited for oleoculture (Callot 1984). Also, 58% of these sites, essentially farms and small villages, produced traces of mosaics. These emblems of status suggest that mosaics in the Antiochene were not designed exclusively for the splendid suburban villas in Daphne.

The exploitation of the hills for oleoculture was not confined to the Jebel al-Aqra alone; the same was documented by the French archaeologist George Tchalenko in the 1930's on the Syrian Jebels to the east (Tchalenko 1953). Environmental similarity, site density, occupation continuum and the presence of olive farms and at least four sanctuaries datable to

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<sup>13</sup> Small of forts of this kind are frequent throughout the Roman Provinces of Syria and Arabia, where their connection with arteries of traffic is comparable to that at AS 190. The Trajanic forts along the Via Nova Trajana are emblematic in this sense. See Gregory 1997 and Kennedy & Riley 1990.

the late 1st century BCE/early 1st century CE allow us to see the two areas as one cultural and economic region. In the case of the Jebel al-Aqra, it is likely that the restricted and yet remunerative economic opportunities offered by this landscape were seized by the veterans of the Syrian legions that were discharged in considerable numbers between the late 1st and early 2nd c. CE (De Giorgi 2007). This process, however, must be viewed in relation to the economic and environmental developments of the region at that time. In particular, the dense web of independent villages and farms in conjunction with the growth of the Amuq lake and its marshes, impaired further settlement in the plain.

Lest we produce an overly positive picture of provincial economy in the Jebel al-Aqra, two points must be underscored; first, the settlement on these hills reached its pinnacle by the 3<sup>rd</sup> c. CE and slowly decreased thereafter, which suggests that there was a finite limit over which the area could be exploited. The patchy nature of cultivable areas posed restraints to both the extension of estates and the developments of new units, hence the dissemination of small-scale holdings on this landscape. Second, while it can be argued that the agencies involved in the shaping of this territory were of Roman military extraction, the presence of a local, indigenous element cannot be discounted. In all likelihood this produced interactions between the two communities at both the levels of village life and economic ventures, especially in the management of the olive oil industry. Various inscriptions from the Jebels (De Giorgi 2007) and also from other Syrian districts like the Hauran (MacAdam 2002) corroborate this hypothesis.

### ***Discussion: The Roman Period***

In summary, the analysis of site distribution in these three different ecosystems, i.e. the Amuq Valley, the Amanus Mountains, and the Jebels, demonstrate a sharp increase of rural settlement during the first two centuries CE (fig. 11). This phenomenon went hand in hand with the physical growth of the city of Antioch and the city may have well produced the nucleations, villages and farms that were essential for its sustenance. This process, however, followed different trajectories in different parts of the research area. The survey data show that the rural expansion in the central Amuq Valley does not seem to have altered the preexisting Hellenistic configuration, an assumption based on the continuity and enlargement that most sites exhibit. Land tenancy systems and the holdings of independent villages and estates (*komai* and *epoikiai* respectively) presumably remained unchanged,<sup>14</sup> while the fertility and abundance of land resources encouraged settlement in the area for decades. New sites also plausibly replicated the administrative configuration of the previous settlement and thus created an infrastructure of Greek type with officials designated in various capacities. Libanius's references to the presence of *komarchoi* and *archons* are emblematic in this sense (McLean Harper 1938, 116-141).

More difficult is the identification of the agencies involved in the exploitation of small units of land; while the interpretation of the data from the Jebel al-Aqra assign a fundamental role to discharged veterans for the economic shaping of this region, no cogent hypothesis can be advanced for the rest of the valley. Nevertheless, the land crises of the 4th c. CE that are the outcome of alienation and accumulation of land in the hands of Antioch's aristocracy, suggests the possibility of a system of small landowners that cultivated and sold their crops to the city's markets (Liebeschuetz 1972, 61-73). Libanius' description of farmers commuting to and from the city, and often exploited by the civic authorities for the transport of bulky materials, strengthens this hypothesis (*Lib.* 1, 26).

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<sup>14</sup> This is of interest as it supports the view that upon the annexation of the Province of Syria, the Roman administration avoided confiscation and distribution of land and rather maintained the *status quo*; see F. Millar 1993.



The emergence of numerous sites in remote districts and hitherto unexploited lands of the Kara Su Valley and especially the Jebel al-Aqra, suggests that ease of access and fertility were not the only criteria that governed settlement. Environmental challenges, investment opportunities and commercial demands alike accounted for the emergence of a new matrix of sites with a thriving olive oil industry. These developments were not confined to the immediate vicinity of the city, but involved the entire eastern and southeastern Antiochene, initiating an urbanization process that would find its culmination in the Late Roman period. The data suggest a continuity of rural settlement that was not affected by the crises and vicissitudes of the 3rd c. CE. Antioch's fall into disgrace under the Severans, Shapur's raids and Zenobia's *coup d'état* were events that, though traumatic, did not affect the economic mechanisms at work in the rural districts. In contrast, there appears to have been a consolidation of the highland settlement at this very time. Imma and its system of associated villages are particularly indicative in this sense. The impact of the military on this region also cannot be discounted. With the increase of war activity in the east, especially during the 2nd and 3rd c. CE, Antioch and its territory were key in the logistics and transfers of legions. The inauguration of the military harbor of Seleukia under the Flavians marked the beginning of a new era for Antioch, one in which the city, its markets and its rural districts benefited greatly from the presence of the legions and their formidable purchasing power.

## **The Late Roman Period (4th to mid 7th centuries)**

*Andrea De Giorgi and Asa Eger*

Preliminary research by the AVRPP assumed that by the Late Roman period,<sup>15</sup> settlement in the Amuq plain and surrounding foothills and uplands reached its height, with sites dotting every part of the landscape; a continuation and peak of the dispersal of settlement that began in the Hellenistic period. This was supported by a widespread phenomenon of urbanization spanning the fourth to sixth centuries CE (Duncan Jones 2004), epitomized by the spectacular villages on the north Syrian limestone hills (Biscop 1997; Tate 1992; Sodini et al. 1980; Tchalenko 1953-58; De Vogüé 1865-77), as well as several surveys carried out in nearby regions (Tate 1992). Further analysis, however, of the 287 sites investigated by AVRPP, shows that the percentage of occupied sites from the Early Roman to Late Roman periods drops from 72% to 47% by the fourth century CE (fig. 13). Further, only 3.5 % of the Late Roman sites consisted of new foundations. These figures take into consideration only sites with definite ceramic identifications, omitting more ambiguous coarsewares, handles, and bases. Including sites with indefinite Late Roman attribution brings the percentage only to around that of the Roman period. As such, the picture of expanded settlement on the limestone hills fails to illustrate certain discrepancies and accordingly, long term processes that led to the emergence of new economies and new shifts in occupation in the fourth century CE.

The AVRPP survey data can be used to demonstrate that the changing settlement landscape of in the Amuq Valley at this time was rooted in three main trends: (1) the consolidation of villages in the plain into fewer sites with strengthened occupation, and disappearance of several small Roman farms in the Orontes and Afrin valleys, (2) the expansion of settlement on the highlands and further expansion of oleoculture on the Jebels,

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<sup>15</sup> The term Late Roman is used instead of Byzantine as a cultural designation, rather than a political period. This is because there is direct continuity both in terms of settlement patterns and material culture with the Roman period that is not easy to separate. Late Roman here refers to the conventional range of the Byzantine period (or early Byzantine fourth- mid seventh centuries), not to the chronological range sometimes attributed to the Late Roman period as an interstice between Roman and Byzantine (second-third centuries).

and (3) the emergence of a web of lesser towns equipped with markets. To address these trends, first certain site categories will be presented including: rural plain sites (canal and river sites, route sites, and tell sites), upland sites, and urban centers, with a view to how the newly founded settlements fit into this continuous and dense landscape. Second, the apparent reduction in the number of sites will be discussed in relation to transformations in Antioch's economic development in the Late Roman phase.

### ***Rural sites in the plain***

Sites on the plain in the Late Roman period (fig. 13), both preexisting and newly founded, were predominately flat or low mounds. While their arrangement was seemingly scattershot, clear patterns can be discerned characterized by their location either along canals or rivers or routes around the plain. In some cases, where canals have not been detected, their presence can be extrapolated by their attendant sites. A linear pattern formed by Late Roman sites AS 87 and AS 223 and Early Islamic site AS 41 suggests that the canalized channel of the Afrin (Afrin A) bifurcated with a northern forked Afrin channel that drained into the lake. While both Late Roman sites were medium sized, their assemblages were among the largest in the plain. AS 87 exhibited a full range of Late Roman pottery that extended just into the seventh century but not beyond (fig. 14.1-14.7 shows Late Roman ceramics from various Amuq sites). Judging from the adjacent sites, the channel would have been in use in the Late Roman period at least until the early seventh century and probably into the Early Islamic. The channel eventually became completely inundated in the process of increased flooding and marsh expansion (see introduction). Two newly founded Late Roman sites (AS 42 and 51) were probably also associated with the same canal or one in close proximity draining off the Afrin A channel. A third newly founded site (AS 179) was located very close to the Afrin B channel. The site was abandoned by the end of the Late Roman period and replaced by a very significant Early Islamic new foundation, AS 257 (see below), suggesting a Late Roman/Early Islamic transition utilizing (or reutilizing) similar waterways. All of these newly founded sites were rather small in size with small assemblages. Settlements depended on canals and rivers not only for irrigation, but as natural field boundaries and transportation conduits, echoing Libanius' remarks of a subdivided landscape conveying produce to the city (Lib. *Or.* 11.260-262).

Route sites were equally important markers for newly founded sites. The largest *ex novo* Late Roman site (in terms of assemblage size) was AS 243. Its settlement in the fourth century replaced several smaller abandoned Hellenistic and Roman sites (AS 241 and 242), suggesting that this new settlement was a consolidation taking advantage of its prominent location on the Antioch-Nicopolis-Germanicia route out of the Amuq plain. Furthermore, the site was equidistant from both Antioch and Pagrae. Several other Late Roman small sites were newly founded (AS 217, AS 221, AS 128) near the Antioch-Chalcis-Beroea eastern route out of the plain.

While the overwhelming majority of Late Roman sites were sited off tells, a few tell sites did have occupation. Braidwood first noted this lack of major occupation on tells in his survey (Braidwood 1937: 46). These settlements were greatly reduced from the pre-Hellenistic occupational phases on the tells, as shown recently by intensive on and off-site survey at Tell Atchana (AS 136) which demonstrated a scant presence of Late Roman ceramics and roof tiles, suggesting that the settlement on the mound, was perhaps limited to "isolated farmsteads, buildings, or encampments" (Casana and Gansell 2005: 157, Casana 2003: 262).<sup>16</sup> At Tell Kurdu (AS 94) the presence of a countermarked coin of Heraclius and

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<sup>16</sup> Furthermore, a high density field scatter north of the mound may suggest either off-site scatter or off-site settlement at the base of the tell in the form of a lower town.

some rooftiles may tenuously indicate the presence of a farmhouse or military encampment in the first half of the seventh century (Vorderstrasse 2006). Re-evaluation of the 1930s Oriental Institute excavations on the plain revealed a small monastery atop Tell al-Judaïdah (AS 176) and a small walled village on Çatal Höyük (AS 167).<sup>17</sup>

### *Upland Sites*

The picture of a reduction of Late Roman sites as compared with the Roman period changes when the uplands are included. Dispersal of Late Roman sites in the uplands was evident in several discrete areas that were surveyed including the three valleys and surrounding uplands in the Jebel al-Aqra and five areas along the Amanus including (from south to north) the Kisecik, Serinyol, Bakras-Belen, Kırıkhan, and Ceylanlı drainages and surrounding uplands (fig. 2). Numerous Late Roman sites were located both on the foothills and in the uplands in all of these areas. In the Kisecik valley and uplands, five sites were identified and all were occupied in the Late Roman period. The furthest one up the valley (AS 232) was a Late Roman foundation. These sites suggest that the extractive industries of the Kisecik mines exploited in the Roman period continued and even flourished in the Late Roman period. Late Roman fortified sites were also found in the uplands. In the mountains above Kırıkhan, AS 334 - high above olive and vine producing elevations - yielded Late Roman pottery. Although it was speculated above to have been an urbanite seasonal retreat, it might also have been associated with transhumant communities. Nearby Kale Tepe (AS 336) was a military fort or watchtower, comprising a square building (4 x 4 m) of large ashlar masonry with a perimeter wall. AS 238 (Serinyol Kalesi) along the Amanus between Antioch and Pagrae was a fortified square structure of stone with a vaulted roof measuring 9.3 x 9.3 m on a larger square platform measuring 30 x 34 m with a possible outer wall.

The Jebel al-Aqra was perhaps the most interesting area for the Late Roman period as it was during this time where settlement reached its peak and was the densest, with sites found all over the lowlands and uplands, slopes and hilltops. Three valleys in the Jebel al-Aqra were surveyed intensively to establish a model for upland and lowland settlement patterns (Casana 2003: 367-412). Virtually every site found was inhabited during the Late Roman period throughout the valleys and uplands. There were thirty-eight sites occupied. Of these, many had good assemblages with finewares (71%), corroborating the pattern seen in the Roman period when over 50% of these sites had associated mosaics. The evidence suggests that these sites were perhaps more than isolated farms but included churches (possibly AS 275), villas, or large farmsteads, despite the fact that there were no main road, canal, or river networks or other strategic and economic considerations. This suggests a slightly different settlement pattern from the plain itself. The six largest sites with the heaviest assemblages were all previously inhabited in the Roman period and located in valleys or near the valley floors. As compared to the plain, the Jebel al-Aqra had a larger proportion of newly established sites (AS 300, 260, 295, 258). All of them were located on hilltops in the uplands. In addition, many were at the heads of the valleys, similar to AS 232 in Kisecik, showing the furthest extent of dispersal of upland settlement in the Late Roman period.

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<sup>17</sup> The Tell al-Judaïdah monastery consisted of a chapel, residential building with mosaic floor, and tombs, encircled by a wall with a cistern beyond the walls. The stone chapel comprised a rectangular nave paved with red brick and a small square sanctuary at its east end with a small room possibly for a tomb attached to the south wall of the nave. The church is comparable to many in the limestone massif and dates to the fifth or sixth centuries. The Çatal Höyük village was confined to the northeast end of the site with a wall separating it from the rest of the tell. It also had an attached cemetery of twelve graves. Unfortunately, the lack of pottery evidence made it difficult to reassess this site other than its designation generally as "Late Antique." These excavations of the 1930s were reanalyzed by Tasha Vorderstrasse (2004: 91-94); for the original publications, see Haines (1971: 10-13, 31-34; pls, 49C, 62, 63B).

The chronology of these sites began as early as the early fourth century and by the mid fifth to mid sixth century the settlement reached its peak. While the majority of the Jebel al-Aqra sites did not go beyond the mid sixth century, some Late Roman sites on the plain had evidence of continuation into the early seventh and in some cases into the Early Islamic mid-late seventh century, as evidenced by the frequent presence of later Late Roman C forms (4, 10, 13) and transitional brittlewares.

### *Urban Centers*

Brevity of space necessitates that only a few comments should be made about Late Roman Antioch with regard to its changing status as a city in relation to its hinterland. Evidence for the reduction of the enclosed city in Antioch is found as early as the reign of Justinian (c. 560 CE) who reduced the “uselessly large wall” (Procop., *Buildings* 68). Antioch’s urban sprawl, noted by Libanius and Malalas as a city that constantly outgrew its borders, became greatly reduced in the Late Roman and Islamic Periods. Historians have argued that the reasons for this include a litany of natural disasters, catastrophes, invasions and plagues that befell the city in the sixth and seventh centuries (Foss 1997: 190; Kennedy 1985: 141-183, cf. n. 33). The beginning of the city’s transformation by the mid sixth century coincides with the reduction in the number of settlements and aggregate land use in the Amuq plain, the peak in upland sites, and the rise of self-sufficient minor towns. It was during this time that environmental changes, specifically erosion caused by intensive cultivation over the entire landscape and deforestation, brought about the permanence of the marshland. These environmental changes would have greatly affected Antioch, which was dependent on the Amuq plain for agricultural production, because the city itself was located in a narrow valley with very little immediate cultivatable land. As such, whatever the specific reasons, the “decline” of Antioch was part of a larger set of transformations that began to take place before the end of the Late Roman period.

One distinct characteristic of Late Roman settlement in the Amuq Valley during the Late Roman phase was the rise to prominence of its minor towns. Hellenistic and Early Roman foundations like Imma (AS 345) and Gephyra (AS 297), hitherto stations along the main routes, now acquired centrality on account of their location and the services that they offered to the surrounding countryside. Imma was not only one of the Antioch-Beroea route stations that were placed on the Peutinger map, but also acted as the portal to Antioch and the rest of Syria for the communities on the Jebel. In the fourth century CE it became an important economic center. Theodoret of Cyrrhus’ mention of a market at Imma in the mid fifth century is of importance (Theod. *HR.* 7. 1-3; see also De Ligt 1993: 73), as it shows us economic strategies that no longer depended on Antioch alone. Late Roman materials (fifth century CE African Red Slip and Phocian Wares predominantly) were collected in two of the surveyed sectors, and many architectural fragments were noted including columns, capitals, architraves, cornices, lintels, and door frames. In situ remains include a Late Roman building (possibly a church) converted into a Middle Islamic fortification (see below), and a stepped podium-type structure in the city center. The fortification masonry contained many architectural fragments stripped from nearby ancient buildings that are now lost (Sinclair 1990: 295-6). While little can be said about the urban layout, some further information about the town during the Late Roman period can be extrapolated from an inscription hastily documented in 1999.<sup>18</sup>

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<sup>18</sup> Various attempts to locate the document for proper recording in the following years were fruitless. We would like to acknowledge, however, Paul Iversen and Kent Rigsby’s thoughtful comments, which were essential in the reading of the text.

[εἰς μνημόσυ]νον αἰώνιον ἔστω·  
 [ἐπὶ τοῦ ἁγί]ωτ(άτου) ἄρχιεπισκ<sup>ό</sup>(που) Φιλο-  
 [+ ξένου? - -]του ἐπενοήθη οὗτ(ος) †  
 [ὁ οἶκος, λει]τουργήσαντος  
 [- *nomen* - π]εριοδ(ευτοῦ). ἔτους Π . .

Line 1: *Let him be remembered forever.*

The formula “the righteous man will be remembered forever”, *Psalm* 111 (*Septuagint* numbering; 112 in some Bibles) resonates greatly in the text.

Line 2: *In the time of the holiest Archbishop Philoxenos (?).*

An Archbishop Philoxenos is attested to by an inscription at Salamis, which dates plausibly after AD 532. (Salamine de Chypre XIII, 206). *SEG* 20.125, in particular, informs Philoxenos’ building activities at the Monastery of St. Barnaba, near Salamis. Although provoking, the hypothesis that the Philoxenos in the Imma’s text and that in Cyprus are the same person is difficult to sustain. The latter, in fact, was probably an autocephalous ecclesiastic whose involvement in the Antioch’s district must be ruled out. In all likelihood the authority responsible for the “conceiving” of Imma’s House of Worship is a Philoxenos archbishop of Antioch, one of the five chief-bishops of the empire.

Lines 3-4: ... *This house of worship was conceived*

Lines 4-5: *While the officiating Ecclesiastical Visitor was [vacat]. Year 568/9 (?)*

Problematic in more than one way, the inscription suggests however that Imma, by means of its geographical position, was an integral part of the religious landscapes of both the adjacent Jebels and the communities settled in the plain. It thus argues against views of sacred landscapes exclusively relegated to the limestone hills of the Syrian Jebels. In this light, Jerome’s mention of the hermit Malchus living in a village thirty miles east of Antioch is particularly evocative (Jerome, *Vita Malchi* 2-3). Several major sites around the town (AS 202 near the watermills discussed above, AS 347, and AS 205) show that there was a concentration of settlement in the area in the Late Roman period. Although the watermills were of Roman construction by architectural parallels, the numerous finds of Late Roman pottery and few examples of Roman and Early Islamic pottery suggest they were in use throughout the Late Roman period and into the Early Islamic.

Little is known about Gephyra (AS 297) as it is obscured by the modern town of Demirköprü. The only remaining element of the ancient town is the bridge. The Roman bridge, spanning the Orontes River, has been used continuously until the present day, where it is located on the main thoroughfare through the city. This bridge would have been part of the main Antioch-Beroea route east and Antioch-Apamea route south out of the plain. In the Late Roman period, the town was surrounded by satellite sites radiating north of it towards the lake. These sites formed a similar complex of settlements around canal systems as seen at Imma.

### ***Discussion: The Late Roman Period***

Although the Late Roman sites on the plain showed a reduction in the number of sites from the Early Roman period, a continuum of settlement patterns was maintained. Former Early Roman sites that continued consolidated into larger settlements. This echoed a similar process described for the Late Hellenistic and Early Roman periods and showed a gradual evolution of small scattered farms that either consolidated over time into larger settlements, or were abandoned in favor of upland settlements. Increased activity in the uplands reached a peak in

the mid fifth to mid sixth centuries in the Jebel al-Aqra. Upland settlement in parts of the Syrian Jebels continued to see new foundations into the mid sixth to early seventh century (Magness 2003: 198).

One factor behind the Late Roman shift from plain to uplands must be sought in the particularly dynamic environment in the plain at the time. The steady growth of the lake and surrounding marshes during the Late Roman period must have played a major role in determining the changing economic strategies in the valley. It has been argued that the permanent growth of the lake and surrounding marshes, while gradual, occurred mostly at the end of the Late Roman period and into the Early Islamic period (Casana 2003: 64-65). This is based on several findings: the occurrence of Late Roman ceramics on beach ridges at the perimeter of the lake, canals built in the Late Roman period as described by the fourth century author Libanius and attested by the AVRPA data, and the erosion susceptibility created by upland settlement and cultivation. While this combination of evidence is compelling, it is reasonable to assume that seasonal inundations of the plain already contributed during the Late Roman period to the flooding of certain canals and settlements. Not only had upland settlement and cultivation and canal building in the plain been in full force already since the Roman period, but also is there evidence at the Arpalı pits near Ceylanlı (AS 287), and in the Bakras valley alluvial fans for gravel deposits covering Hellenistic through Late Roman architectural strata (Casana 2003: 75). Settlements that were abandoned in the plain in favor of upland locations could take advantage of the burgeoning olive oil and wine producing markets.

Next to environmental transformations, economic shifts also contributed to the pattern of upland sites and land use in the fifth and sixth centuries, mainly in the densely settled limestone hills to the east of Antioch. Urban centers remained part of the network of key transportation nodes on the edges of the Amuq Valley. The towns changed, however, as they began to operate more independently by incorporating agricultural lands, gardens, canals, and watermills within the city walls, as well as satellite sites in a micro-regional system. The alleged self-sufficiency of Antioch's rural district in the fourth century CE (Liebeschuetz 1972: 60) may have been grounded in the economic opportunities and new markets that foci like Imma provided its surrounding sites. While this notion of self-sufficiency is problematic,<sup>19</sup> it is apparent that this historical phase witnessed important economic changes. The region's economic thrust was now situated on the limestone hills to the southeast of the city. The dense settlement in this region between the fourth and fifth centuries CE corroborates the picture (Foss 1997; Gatier 1994: 45). What needs to be emphasized is that by swinging toward the Jebels, Antioch's economic pendulum broke with the tradition of town *and* country that was a hallmark of the Hellenistic and Early Roman period.

Finally, the reduction of the number of villages and farms in the central Amuq Valley must be seen against the background of the expansion of larger estates that incorporated smaller holdings and often entire villages (Liebeschuetz 1972). These properties belonged essentially to urbanites of curial origin, the city's administrators and the wealthy landowning families that had also monopolized the city's markets. The absorption of land that previously belonged to villages and independent farms was a typical component of Late Roman landscapes by and large (Ruggini 1961: 23), and Antioch was no exception. Libanius' speeches, in particular, reflect this situation and inform us of these dynamics of change (Lib. 47, 4). This trend reverberates in the AVRPA records, and becomes tangible in the consolidation and increase of larger sites. The particular incidence of African wares as well as

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<sup>19</sup> It can be safely inferred that the Late Roman Jebels's economy, centered upon the production of olive oil, was rather integrated in far-flung commerce exchanges that had Constantinople as a main terminus. For a thorough discussion of this problem see Decker 2001.

later Phocian wares, provide the chronological framework for these processes. The data suggest that the economic strategies of urban and rural agencies that had shaped this valley for centuries were slowly superseded by schemes that resulted from the expansion of estates belonging to Antiochene families. It is in these terms that we can illustrate the difference between the Amuq Valley, exploited in ways that were the reflection of a minority's economic outlook, and the areas adjacent to the limestone hills, where lesser towns and villages began to provide the services that the capital could no longer accord.

This dichotomy, combined with the fragility of this eco-system, produced catastrophic effects when faced with crises. The food crisis of 362 CE (Garnsey 1988), of presumably small proportions but by no means different than other previous events of this kind,<sup>20</sup> demanded drastic remedies and brought into focus the endemic vulnerability of ancient economies, as well as the limits of a city where a minority owned most of the land and controlled the markets.

## **The Early Islamic Period (mid 7th to mid 10th centuries)**

*Asa Eger*

The transition from the Late Roman to the Early Islamic period was marked by changes in settlement patterns in part as a response to environmental change (fig. 15). In the seventh century, the transition occurred unevenly with political changes manifesting themselves as the quickest and most visible, followed by economic reorientation, and lastly cultural transformation (and material cultural) evincing the most gradual response. It follows that settlement patterns and environmental change would likewise be gradual and not readily apparent. While this becomes true on a general level, there are distinguishing factors from one period to the other that are a result of varied responses to increasing environmental change. It will be proposed here that these may have been due to ethnic and cultural differences. As such, to differentiate the transition and chart settlement patterns and environmental change it is necessary to define certain criteria that enable an examination of sites with nuance and degree, rather than stating that the settlements were statically transitional (Late Roman-Early Islamic), or one or the other (Late Roman or Early Islamic). These criteria include arbitrary and multiple categories and subcategories of: (1) newly founded versus preexisting settlements; (2) chronology; (3) definite versus indefinite occupation (based upon known diagnostic ceramic evidence, see fig. 16); (4) site size (small: 1 ha and less; medium: 1.01 to 8 ha; large: over 8 ha); and (5) assemblage size (light: 1-2 sherds; moderate: 3-7 sherds; heavy: 8+ sherds). Such a model is inherently imperfect, but can be tested on the Amuq to examine its potential efficacy.

Settlement in the Early Islamic period did not have a direct continuity from the Late Roman period as shown by the number of sites occupied overall and by the number of newly established Early Islamic period sites (*ex novo*) as compared with Late Roman sites that continued into the Early Islamic (preexisting). For the number of sites overall, the Early Islamic period was significantly reduced by nearly half. In the Early Islamic period, 23% of sites (67 of 287) in the Amuq were definitely occupied as compared to 47% (136 of 287) in the Late Roman period. The picture changes little with the addition of indefinitely occupied sites (77% Late Roman, 46% Early Islamic). The lack of direct continuity between the Late Roman and Early Islamic is also reflected by the number of new versus preexisting sites. Although 9% (6 of 67) of the Early Islamic period sites occupied were newly founded and

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<sup>20</sup> 46-47 CE, under Claudius. See Orosius *Hist.* 7.6.12.

72% were preexisting,<sup>21</sup> the preexisting sites only encompass 39% of definite Late Roman sites. In other words, more than half of the Late Roman sites did *not* continue into the Early Islamic period.

This differs from results from other surveys and excavations which show a more fluid continuity between the sixth-eighth centuries whether due to ceramic redating (for example, Magness 2003, 214) or indeterminate ceramic identification (for example, Avni 1996, 8). These interpretations compensated for earlier practices of supposing marked decline in settlement either at the end of the Late Roman period (with the arrival of the Muslims) or the end of the Roman period.<sup>22</sup> The method of analysis used here will allow for a division of sites and more reliable distinctions between Late Roman and Early Islamic settlement patterns. The same categories of Late Roman site types (canal and river sites, tell sites, route sites, upland sites, and urban centers) will be examined in view of how they remained the same, transformed, or gave rise to new site types.

### ***Canal, river and marsh sites***

The largest and most important sites in terms of physical size and assemblage in the Early Islamic period were flat or low mounded sites along canal or river systems and in the expanding lake and marshlands. During the Late Roman-Early Islamic transition, the Afrin A canal (fig. 2, 15) continued to be used as evidenced by the aforementioned Late Roman sites and a newly established large Early Islamic site (AS 41, 25 ha) further away from the lake. The Afrin B canal flowed further north and bifurcated in two straightened canals, like the Afrin A canal, before emptying into the lake. Three large sites along the Afrin B canal, evenly spaced, were established *ex novo* and accordingly date the canal's construction and use to the Early Islamic period, beginning in the second half of the seventh to early eighth century. Two of these sites, including AS 257- at 35 ha the largest Early Islamic site on the plain<sup>23</sup> - and AS 224 (6 ha), were spread out to either side of the canal as double sites, while the third site (AS 185, about 4.5 ha) was divided into two mounds on one side of the canal.<sup>24</sup> That great importance was placed on controlling water sources on the plain from the beginning of the Early Islamic period in the seventh-eighth century is evidenced by the establishment of four out of six new Early Islamic sites whose large size and 'heavy' assemblage size were pronounced by their central location on the Afrin canals. Furthermore, it demonstrates how such canals can be dated via their proximal sites.

The second major grouping consisted of three evenly spaced sites in the northern part of the plain along the banks of the Yaghra river, no longer flowing today. These sites (AS 32, 29, and 25) averaged 12 ha, had 'heavy' assemblages, and were mainly preexisting

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<sup>21</sup> These percentages exclude the 'swing' category of definite Early Islamic sites with indefinite Late Roman occupation which could be attributed either way. Taking this category into consideration, Early Islamic *ex novo* sites would range between 9%-28% and preexisting sites would range between 72%-91%.

<sup>22</sup> In the Syrian Jebels we see an evolution in interpretations of the first settlements, from (1) they continued until the end of the Byzantine period (Tchalenko 1953-8), (2) they continued until the 10th century but in a state of decline (Sodini 1980; Tate 1992; Gatier 1994), (3) they already reached decline by the mid-sixth century due to natural disaster and plague (Kennedy 1985), (4) instead of decline, they stagnated in 'squalor' until the tenth century (Foss 1997), to (5) they continued from the Byzantine to Early Islamic period until the 10<sup>th</sup> century (Magness 2003).

<sup>23</sup> This does not include the known urban sites of Anṭākiya, Jisr Hadid (AS 297), and ʿImm (AS 345) which have continued as large sites until today and as such, modern development obscures their Early Islamic extent.

<sup>24</sup> The Yaghra site AS 29 was similarly arranged as a double site. A parallel for double river sites occurs in the Balikh valley where the sites of BS 108, 109, and 110 on both sides of the Balikh river formed one site identified in texts and primarily dating to the ninth century (Bartl 1993/94: 36).



settlements.<sup>25</sup> The Yaghra river sites had larger assemblages both by comparison with their previous Roman and Late Roman occupations and with the Afrin sites, even though the expansion of wetlands was more extensive for the Yaghra river area rather than the Afrin canal area by the Early Islamic period (Casana 2003: 65).<sup>26</sup>

In both the Afrin channels and Yaghra River, the site assemblages show a growth in physical size and assemblage from west to east, away from the spread of marsh. This is mirrored by a gradual chronological shift from predominately Late Roman and Early Islamic seventh centuries nearer to the lake to late Early Islamic and Middle Islamic tenth centuries further east<sup>27</sup> and by the eventual abandonment of the Afrin canal A in favor of canal B. While these shifts were to accommodate the expanding lake and the encroaching wetlands, the sites were not immediately abandoned in the Early Islamic period. Rather they had a fairly contemporaneous overlap with each other indicating that the sites were in or in close proximity to wetlands throughout much of their occupation. Some of these sites, such as AS 32 and AS 41 were certainly marsh sites, as was a seventh/eighth century site found in the Lake of Antioch (AS 180).<sup>28</sup> These marsh/canal sites were partially a response to the growth of marsh caused by advanced erosion sedimentation on the plain and subsequent flooding of the rivers and canals of the previous periods.

The marsh site as an Early Islamic phenomenon is supported by parallels in settlement patterns seen throughout the Islamic-Byzantine frontier (*al-thughūr* and *al-ʿawāṣim*) in regions such as Marʿash and Qinnasrīn (Whitcomb 2000, 2001), the Cilician Plain, and Raqqa/Rafīqa (Meinecke 1991: 17-32).<sup>29</sup> Marshlands were important ecological niches for certain types of inhabitants, supporting a way of life characterized by mixed cultivation, reed gathering, and fishing (Pournelle 2003). Adaptation and settlement in marsh environments would have been familiar to the new settlers of the region, such as the Zuṭṭ and Sayābija who came with their families and water buffalo (*al-jamūs*) from the wetlands of southern Iraq. In replicating a similar lifestyle, they may have lived on islands or mounded settlements built up with reeds.<sup>30</sup> Such marsh settlements of reed and mudbrick are notoriously hard to discern in the archaeological record and so it is certainly possible that the gap between the number of Late Roman and Early Islamic sites was smaller than it appears. Furthermore, marshes were

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<sup>25</sup> AS 32 and 29 were founded in the Late Hellenistic or Early Roman while AS 25 had indefinite preexisting Late Roman occupation.

<sup>26</sup> The site of Yaghrā, known only in Middle Islamic sources as a village on a river of the same name should be one of the three Yaghra River sites (Abu al-Fidā: 41-2). He described its population as Christian. The site has been identified with Muratpaşa (AS 25) partly on the basis of its size which is indeterminate but larger than the 12 ha sites of AS 32 and 29 and because it had the largest Middle Islamic assemblage and a Middle Islamic inscription. Yaghrā has also been incorrectly associated with the classical site of Meleagrum, mainly based on the corruption of the name although there were virtually no Late Roman ceramics were discovered.

<sup>27</sup> This shift is further emphasized by AS 187, a large Roman site located south of AS 32 nearer to the lake, further downstream on the Yaghra River. The absence of ceramics after the second century CE suggests that it was entirely submerged and left in favor of sites further upstream.

<sup>28</sup> A parallel for this lake/marsh site is found in the Jabbul plain east of Aleppo. Site JS 144 (Tell Wasta) was an island site on a rocky outcrop in the similar large marshy Jabbul Lake and dated to the Late Roman period (Schwartz et al. 2000: 453).

<sup>29</sup> The word *raqqa* in Arabic refers to marsh areas that form along rivers during seasonal flooding.

<sup>30</sup> Other textual sources from the Middle Islamic period for the Ghab and Amuq and ethnographic work describe marsh dwellers who lived in settlements such as these. For ethnographies: Weulersse 1940; Ainsworth 1842: I.36-9. For textual accounts: Abū al-Fida 41. Recent excavations in the lower town (south) of Tell Qarqur in the Ghab revealed an Early Islamic/Middle Islamic lower town that was not built up but could have been an example of island marsh settlement. The majority of the faunal evidence showed wetlands subsistence, while the pottery was mainly fourteenth century, corroborating Abū al-Fida's accounts. It is interesting to note that the tell itself was only slightly occupied and perhaps given over to agriculture and pasture (Casana, pers. comm.)

prime areas for pasture (Str. 16.2.10).<sup>31</sup> Such a joint subsistence system would have certainly made use of the seasonal expansion and reduction of the marsh waters and the constantly renewed pastureland. This is important for large groups with herding animals or horses such as pastoralists or armies. During the Early Islamic period, the Amuq Plain in the *thughūr/ʿawāṣim* frontier zones was a central staging area and pasturage for summer transhumance (and raids) over the Taurus Mountains into Byzantine land.<sup>32</sup> The summer months would have been when the plain was driest. In the winter when the plain was fully inundated, pastoralists and armies remained and made use of it as a wet pasturage, particularly as the waters receded by early spring. Marsh settlement constituted a new form of adaptation to an increasing wetlands environment previously regarded as marginal.

### ***Fortified square enclosures (waystations)***

The three small upland fortifications already discussed as part of the Late Roman settlement pattern showed no continuity with Early Islamic fortifications. Rather, in the Early Islamic period, upland sites for fortifications were eschewed for fortified square enclosures built on important land routes on the plain. At least one site was discernable as a square enclosure with fortified walls and towers. AS 190 at the north end of the Amuq plain was sited both for its strategic location, as it offers a long view north in the Islahiye-Kara Su valley and south to the Amuq plain (and guards the entrance), and for its location on the main north-south Antioch-Marʿash road. The enclosure, measuring 70 x 70 m with preserved stone walls, corner towers, and rooms along the interior perimeter may have had an extramural settlement indicated by a rubble field of architectural fragments including basalt columns. The site was dated to the eighth-tenth centuries but had a few Roman and Late Roman sherds that may belong to an earlier phase of this site and/or another nearby site. This fortified square enclosure site type is similar to others found throughout the *thughūr* in the eighth-tenth centuries (mainly ʿAbbāsīd period) (Algaze, Breuninger and Knudstad 1994: 390-1, Algaze 1991: 395, fig. 124, Redford 1998: 17, fn. 74).<sup>33</sup> These structures all occupied important stopping points on north-south land routes connecting North Syria (*al-ʿawāṣim*) and Northern Mesopotamia (*al-jazīra*) with the *thughūr*. As frontier sites, they are small by comparison to the *thughūr* cities such as Ṭarsūs, al-Maṣṣīṣa, ʿAyn Zarba, Kanīsa al-Sawdā, Ḥadath, and Malaṭiya. Nevertheless they seem to be part of an organized system of new Early Islamic waystations established in the late eighth to tenth centuries. Whether this was state-sponsored or the initiative of local rulers is unclear at present. Such a question fits into the larger debate over the meaning of the “desert castles” in the Early Islamic period.

The frontier site of Būqā is the only Early Islamic unidentified site said to be located somewhere in the Amuq plain near the lake in the district of Anṭakīya. Ibn Khurradādhbih in the ninth century lists the place among the *ʿawāṣim* frontier sites (Ibn Khurradādhbih 65). Textual evidence suggests the site was occupied very early on during the Early Islamic conquests and possibly preexisting (Balādhurī *Futūḥ al-buldān* 229; Yāqūt *Muʿjam al-buldān*

<sup>31</sup> Strabo, writing in the early first century CE, specifically comments on the site of Apamea further up the Orontes in Syria almost completely encircled by the river and the utilization of part of the surrounding plain as horse and cattle pasturage side by side with the activities of marsh dwellers.

<sup>32</sup> Apocalyptic prophecies specifically allude to the meadows of the Amuq as a battle ground for one of the final battles (Madelung 1986: 174).

<sup>33</sup> New excavations in 2006 by Asa Eger and Andrea de Giorgi on the coast north of Kinet Höyük (on the route from Iskenderun into Cilicia that can be identified as Ḥiṣn al-Tīnāt) located a building, whose size is still undetermined, with an outer fortification wall with rooms along the interior and a tower dated to the ninth-tenth centuries with a possible earlier structure below dating to the eighth century.

i.510, *Marāṣid al-Ittilāʿ* i.231; Ibn Shaddād, *al-Aʿlāq al-khaṭīra* ii.422).<sup>34</sup> In 669-670 CE, Muʿawiya brought the aforementioned ‘Marsh Arabs’ and settled them at Būqā (Balādhurī 221, 230). That the site continued through the Early Islamic period is evident as it was taken in by the Byzantines in the reconquest between 948-9 CE. The tenth century map of Ibn Ḥawqal, while inaccurate and unproportional, indicates the site of Būqā on a road between Baghrās and Marʿash, suggesting that it perhaps is synonymous with the square enclosure of AS 190 described above. Yāqūt’s description further states that the site was located in *al-ṣaʿid* and was a *hiṣn*. The term *al-ṣaʿid*, while conventionally translated as uplands, may refer to the upper part of the Amuq plain and Kara Su course. This is appropriate given the fact that Būqā was settled by marsh dwellers who did not live in uplands. Furthermore, it also strengthens the identification of Būqā with AS 190 which was located upstream on the Kara Su valley of the Amuq plain.

### ***Route sites***

In the seventh and early eighth century, several large preexisting sites (such as AS 122) with heavy assemblages sites interspersed along the Antioch-Beroea road continued and perhaps increased while some smaller Late Roman sites were abandoned (AS 217, 221) and perhaps consolidated. In the eighth century, many smaller sites (such as AS 128) of light to medium size and light to medium assemblages began filling in the spaces between these and the urban towns of Gephyra and Imma along the road. Small sites between the Orontes and Afrin river basins also appeared only in the eighth century, probably associated with canals and marsh. These smaller eighth century sites indicate a minor growth of settlement in the second phase of the Early Islamic period following the transition and initial settlements.

### ***Tell sites***

While the majority of tell sites had no evidence of Early Islamic occupation (including Çatal Höyük, Tell al-Judaidah, and Tell Atchana), several tell sites did. Of the definite Early Islamic sites 12% were tell sites. All of these had light to moderate Early Islamic assemblages. At three of the sites (AS 253, 35, 91) pottery came from the base of the tell in what was perceived as a lower town. Thus, tell occupation during the Early Islamic period was few and far between as Early Islamic settlements followed the Roman-Late Roman pattern of dispersed, non-tell-based sites and lower towns. The majority of tells and land on top of them may have been given over to farming or pasturing with small attendant settlements, much like today.

### ***Upland sites***

In the Early Islamic period there were, by contrast to the Late Roman period, very few upland sites. Of the five Late Roman sites in the Kisecik valley, only AS 232, in the immediate vicinity of copper, gold, and steatite mines, continued to be occupied (Casana 2003: 267). AS 246 was a medium sized upland site and a major heavy assemblage site. It clearly guarded the road through the Belen pass. In the Jebel al-Aqra, the amount of sites that continued was reduced by two-thirds: thirteen sites in the Early Islamic period. However, more than half of these sites only bore slight continuity into the late seventh century and thus could be seen as Late Roman sites with extended occupations. The sites were for the most part located on the valley floors or on nearby low slopes. An exception was AS 275 located on a hilltop overlooking the Kozluca Valley. It may have been a Late Roman settlement that continued to be occupied, based on its continuity and location. That there were only three hilltop sites in

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<sup>34</sup> A fort (*hiṣn*) at Būqā was built and then refortified and repaired under the caliph Hishām at the same time as Baghrās.

the Early Islamic period is not an indication, however, that settlement patterns during this time reverted to the patterns of lowland nucleated settlement centers seen in the Bronze and Iron Ages (Casana 2007: 209). Early Islamic settlement avoided the Jebel al-Aqra as a whole in favor of centralized canal, river, and marsh locations. This is an important contrast, particularly due to the fact that much of the plain was given over to permanent and seasonal wetlands. Those upland sites that were occupied may have been continued from the Late Roman period or fulfilled special functions such as the Kisecik mining site.

### *Urban Centers*

The Late Roman network of urban centers and towns located around the edges of the plain, continued through the Early and Middle Islamic periods. By the Early Islamic period, Antioch (Anṭākiya) was further reduced from its Late Roman extent and became secondary in importance to the provincial capital city of Beroea (Halab, Aleppo), which was for a time the capital (*qaṣaba*) of the *ʿawāṣim* province. The process of reduction seen in the Late Roman period coupled with the departure of many Byzantines from the city at the time of the Early Islamic conquest in 635 CE would have significantly changed the face of Antioch. Early Islamic textual sources referring to agricultural lands forming a buffer around a reduced urban core combined with the archaeological remains of watermills at Sultan Merkezi describes a greatly transformed, more self-sufficient, smaller town in the Early Islamic period rather than the Roman ‘parasite’ city that received all of its goods and trade from the hinterlands (Yener & Wilkinson 1998/99).<sup>35</sup>

At Imma (ʿImm), surveys in and around the town itself (AS 344 and 345) found many transitional seventh, seventh-eighth, and eighth-tenth century ceramics and architecture specifically at the *kale* (see above) and city center sectors and the city walls, 200 m to the north. The network of Imma, its satellite sites and canal systems grew in the Early Islamic period. The predominately Early Islamic site of AS 204 attests to this transformation and the continued use of the canal system. By the end of the Early Islamic period (and into the eleventh century), textual sources corroborate the archaeological evidence, indicating that Imma was a Christian town level with the former urban metropolis of Antioch in a more equal and reduced hierarchical status.

In the Early Islamic period, Pagrae (Baghrās) guarded both the east-west Antioch-Alexandretta (al-Iskandaruna) route and the north-south Antioch-Marʿash routes in the *thughūr* (fig. 10, 15). However, survey in the area of the castle (AS 247) revealed no Early Islamic presence.<sup>36</sup> Rather, the Early Islamic site of Pagrae should probably be identified lowland site (AS 248) situated at the foot of the Belen pass. This is supported by the Islamic sources that describe the site of Pagrae as a town (*madina*) at the foot of the Amanus Mountains (*lihḡ jabal al-lukām*) (Yāqūt, *Marāṣid* i.209). Early Islamic material was found under the remains of the Late Islamic khan at the northern end of the large Roman and Late Roman site. This suggests that the Early Islamic occupation may then have been reduced from the 3 ha classical site (Casana 2003: 308) or it may have been founded peripheral to the site. While this identification is convincing, it raises a question as to the identification of the

<sup>35</sup> The mills at Sultan Merkezi (AS 227) outside the city are very well preserved and dated in two phases to the Late Roman/Early Islamic and Ottoman Periods. Ibn Ḥawqal (165) speaks of cultivated fields (*mazāriʿ*), pasturages (*marāʿ*), trees (*ashjār*), and mills (*ārḡiya*) within the city walls contributing to an overall comfortable self-sufficiency (*wa mā yastaqallā biḡ ḡhliḡ min marāʿifiḡiḡ*).

<sup>36</sup> Despite the fact that the fort is mentioned by numerous authors: Balādhurī (*Futūḡ al-buldān* 228) and Yāqūt (*Mʿujam al-buldān* i.427 from Balādhurī) state that the Umayyad caliph Hishām established a garrison and built a fort (*ḡṣn*). Ibn Ḥawqal (169) mentions that the fort had a *minbar*. Zubaydah, the wife of Hārūn al-Rashīd and patron of the Darb Zubaydah, founded a hospice (*dār ḡiyāfa*) beside the fort that was referred to (perplexingly) as the only one of its type in Syria.

nearby site of Çakallı Karakol (AS 246) situated on a hill north of AS 248. AS 246 was also a major site guarding the Belen pass and situated near the old Belen pass road. The site was not only physically larger (4.2 ha), but it had larger ceramic assemblages from the Hellenistic-Middle Islamic periods than AS 248. Both of these sites attest to the importance of a continuing urban and unfortified presence along the routes leading either north or west to the Byzantine frontier.

### ***Discussion: The Early Islamic Period***

By the Early Islamic period, only about half the number of sites occupied in the Late Roman period continued, a pattern seen in other surveys in the region (Algaze, Breuninger and Knudstad 1994, Wilkinson 1990). Early Islamic settlement followed the same pattern as Roman and Late Roman sites of low, flat, non-tell based and dispersed sites. Additionally canal and river sites and route sites remained important loci for new settlement, while tell sites were continuously avoided. Early Islamic settlement patterns contrasted from former Late Roman ones in that they eschewed upland settlement in favor of the increasingly inundated marshy plain. Besides the known urban sites, the most important unidentified sites on the plain in the Early Islamic period were the mainly preexisting sites along the Yaghra river and the newly founded sites on the Afrin Canal B, all in or on the edges of marshlands. These sites, as yet unidentified, probably constituted consolidated towns or large villages, a continuity of the Byzantine *kômai megalai* or *metrokômai* (Gatier 1994: 27). Fortified upland sites, seen in the Late Roman period, were also not part of the Early Islamic pattern of settlement, but occurred later, during the subsequent centuries of the Middle Islamic period. Rather, a system of fortified square enclosures or waystations was part of a new Early Islamic settlement system on the *thughūr* frontier.

An examination of the sites using various criteria such as physical size, assemblage size, preexisting or newly established settlement, chronology, and definite or indefinite occupation has added levels of variance and degree to Late Roman and Early Islamic settlement. This nuance can be used to develop hypothetical ethno-cultural inferences of population and demography in both a transitional period and culturally mixed frontier zone. What can be suggested is that Muslim settlement in canals and marshes were sited to control water rights and utilize the broad range of wetlands resources, perhaps a result of the influx of marsh dwellers, just as waystation sites controlled frontier movement. Late Roman settlements that increased significantly in the Early Islamic period (urban centers and the Yaghra river sites) may suggest mixed ethnic and religious Muslim and Christian communities resulting from incoming Muslims adding to a community of already present Christians. By contrast, scattered Late Roman sites that were reduced by the Early Islamic period on the plain or that showed some continuity in the uplands may represent Christian communities. These shifts in settlement patterns do not indicate general abandonment, decline, or a level of “squalor” in the Early Islamic period or by the mid-fifth century as argued by historians and archaeologists alike, but show new changes in settlement as well as patterns of continuity.

### **The Middle Islamic Period (10th to 14th century)**

*Tasha Vorderstrasse and Asa Eger*

The term "Middle Islamic", used here in an archaeological sense, is historically speaking a misnomer when applied to the Amuq Plain.<sup>37</sup> One reason for this is that the Amuq Valley and the city of Antioch were under political control of the Byzantines and the Franks in the period that one might term Middle Islamic. It is only for a short period that the Seljuks (1084-1098/1099) reigned in the area before they were swept away by the invading Franks. Culturally, however, the region has much in common with areas that were under Muslim control, in both historical periods. The material culture of the Middle Byzantine period shows very little sign of Byzantine influence, and although the Frankish principality developed certain types of pottery that were distinctive, they were largely free of any western influence and are very similar to types found in the Kingdom of Cilician Armenia and Ayyubid/Mamluk Syria (Vorderstrasse 2005c). Only coin types, as the official outlet of the government, are distinctly Byzantine or Frankish (see discussions in Vorderstrasse 2005a: 93-95, 113-118).

The assessment of the settlement history in this period is based upon an overall study of the survey pottery by Asa Eger and by a detailed study of selections of the pottery in 2002 and 2006 by Tasha Vorderstrasse. Since the study of the pottery is continuing, this and the following section on Late Islamic period settlement are preliminary and may change once all of the sites have been examined thoroughly. Currently, based on the combined studies of Eger and Vorderstrasse, 44% of the sites surveyed have been identified as having Middle Islamic occupation showing a considerable degree of discontinuity from the Early Islamic to the Middle Islamic period (fig. 17). About 47% of the sites occupied in the Early Islamic period were occupied in the Middle Islamic, which means that about half of the sites were abandoned by the mid-tenth century. Meanwhile, new settlements can be found at sites which had no evidence of Early Islamic occupation. The majority of Middle Islamic settlements occupied in the Amuq occurred between the late eleventh to early fourteenth centuries. As such, settlement patterns in the Middle Islamic period can be separated into two phases, the poorly settled mid tenth to mid eleventh centuries (or Middle Byzantine phase) followed by the late eleventh to early fourteenth centuries (or Frankish phase).

### ***The 10th-11th centuries (The Middle Byzantine phase)***

The century immediately following the Byzantine reconquests is archaeologically very poorly represented in the region and appears to have been a period of decline. As previously stated, by the tenth century, the majority of small and dispersed upland sites in the Jebel al-Aqra and Syrian Jebels were abandoned. However, the evidence from both material culture and historical sources presents a more complicated scenario. As such, it is open for discussion whether there was a period of serious settlement decline at beginning of the Middle Islamic period, from the mid 10th to the mid 11th century.

The knowledge of the ceramic traditions of this period is unequally divided over relatively well-known glazed wares and poorly understood unglazed wares. This introduces a bias into the reconstruction of settlement patterns, with (rural) settlements with low percentages of glazed wares being more difficult to recognize and date accurately. Some types of glazed wares, such as splashed ware sgraffiato, can be dated to this subphase of the Middle Islamic period, perhaps to be equated with the period of Byzantine re-occupation of the Amuq (969-1084 CE) (fig. 18). This is a development of splash ware pottery that was already present in the region in the Early Islamic period, demonstrating a continuity of local production (Vorderstrasse 2005a: 96-97). Middle Islamic period splashed ware with sgraffiato is likely to have been produced in the region (perhaps at Antioch) and used by residents of

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<sup>37</sup> Other terms, such as "medieval" could also be used in this context, but Middle Islamic is preferred because the material culture of the region is seen as being largely Islamic in nature.

both inland and coastal sites such as al-Mina. It was not common, however, in the AVR P collections.

Historical and numismatic sources seem to point to a prosperous population with a highly monetized economy. It is ironic that in the earlier part of the Middle Islamic period, when our archaeological evidence about the region is rather coarse-grained, we have some of the most detailed descriptions of the area since Libanius and John Malalas. We owe these to Ibn Butlan, a Christian doctor who travelled to Antioch in the 10th century and eventually settled there. Even taking into account the fact that Ibn Butlan is clearly biased in favor of Antioch, which appears to have been his favorite city, his work contains some valuable observations about Antioch's countryside (Le Strange 1890; Conrad 2001: 143, 150). According to Ibn Butlan, the land between Antioch and Aleppo was very fertile and populous, filled with villages, and without any ruins. More negatively, he holds that the town of Imma was full of prostitutes, pigs, and wine. Ibn Butlan also mentions an earthquake in the Amuq where many farms were flooded, new swamps emerged, and a large church and fortress were swallowed up and people fled to the hilltops (Conrad 2001: 143).

One could dismiss Ibn Butlan's description of a highly prosperous region as mere hyperbole, except that the numismatic evidence in the Amuq region appears to confirm his statements. The number of coins from this period found in the Çatal Höyük excavations was remarkably high, accounting for almost half the coins found there (Vorderstrasse 2005b). This could point either to a considerable degree of monetization in at least part of the plain or to the presence of a military garrison at Çatal Höyük (Vorderstrasse 2005b; Vorderstrasse forthcoming).<sup>38</sup>

However, the century or so of discontinuity is equally well attested in many historical sources independently as a period of general decentralization in the frontier region with the waning political and economic influence of a central government and large urban polities. During this century, the largest migration of nomadic and semi-nomadic Bedouin out of Arabia since the conquests arrived to the *thughūr* and *jazīra* (Cappel 1994). In the absence of central power, these groups rose as local independent tribal dynasties based around major towns and used the surrounding lands as pasture, effectively changing the balance of tribes that had largely become sedentary. The renomadization was noted throughout the region of northern Syria and Mesopotamia (Bartl 1996: 337; Tonghini 1998: 18, 71; Haase 1983: 75).

A transformation of the settled landscape of villages to a more transient landscape of camps is difficult to pinpoint in the heavily aggraded plains of this frontier region. But then again, it is precisely the accrued level of aggradation from irrigation systems which may have contributed to this settlement transformation, as demonstrated by increased marshification and the inevitable termination of major canal irrigation systems by the end of the Early Islamic period (Willkinson 1998: 82). The possibility of real decline is indicated by the low number of sites with confirmed occupation from this first phase of the Middle Islamic period, and is supported by attestations in the historical sources for a period of fragmentation and political instability.

### ***The 11th-14th centuries (The Frankish phase)***

In the second Middle Islamic phase, there was a new peak in occupation, and settlements occurred across the Amuq plain. The densest areas were to the south and east of the lake of

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<sup>38</sup> As the excavated medieval pottery from the site has yet to be located, however, it is not possible to assess the nature of the settlement in detail. The lack of pottery from the site means that we do not know the date of the latest, walled, phase (level 1) of Çatal Höyük. It could theoretically date any time from the end of the Roman period onwards.

Antioch (fig. 17). The ceramic assemblages included several types of glazed pottery such as Port St. Symeon ware, Raqqa ware, and imported Byzantine pottery (fig. 18). Port St. Symeon ware was made in the region and is the most common glazed pottery type among the Middle Islamic period Amuq Valley sites. This is followed by Raqqa wares, which were probably imported from the east. No evidence yet exists that this type of pottery was made in the Frankish Principality of Antioch, although it is possible. The imported Byzantine pottery was presumably brought into the region through ports such as al-Mina, but was rare among the Amuq Valley survey collections. There was not the same degree of variation of pottery as one finds in the excavations of al-Mina, Kinet Höyük, and Antioch. Italian proto-maiolica was entirely absent (Vorderstrasse 2006: 333-335).

The later Middle Islamic period occupation in the Amuq Valley and surrounding uplands was represented by a variety of sites, including small field scatters that probably identify farm sites, larger villages, tell sites, and castles. Imma (AS 345) was one of the sites where splashed ware sgraffiato pottery was found, indicating that settlement continued from the Early Islamic to the Middle Islamic period. It probably remained the main settlement in the eastern part of the Amuq Plain throughout the period. Sinclair believes that the church at Imma, which he interpreted as Late Roman, was fortified at some time during the Frankish period (Sinclair 1990: 295-296), when churches in the limestone hills were also fortified (Vorderstrasse 2005a: 110). An alternative possibility is that the fort replaced the church in the Frankish period and was not a fortified church at all.

The patterns of consolidation traced in the Late Roman and Early Islamic periods advanced even further where newer and dispersed settlements shifted from scattered farms toward conglomerate villages (some made up of groups of farms) and small towns, recombining a similar process of pre-Hellenistic nucleation with already dispersed sites in a new pattern of “nucleated dispersal”. In some cases the villages grew to the level of importance of the cities, advancing the pattern of equalization of cities and towns in the Late Roman and Early Islamic periods. Interestingly, Muqaddasī writes of the Amuq that: “in this region villages (*qurā*) are more splendid and larger than most of the cities (*mudun*)....” (Muqaddasī 155.1-5). Unlike the Early Islamic period, there were no discernable canal building projects. Agriculture was probably practiced in extremely localized fields around sites with a heavy emphasis on nomadic pastoralism. Industry, including ceramic and glass production, was also present. One such example of a conglomerate village was the town of Arṭāh (formerly Late Roman Artesia) a few km north of Imma in the Amuq, reinhabited in the Middle Islamic period. In the 13th century, Ibn Shaddād described a small town (*madīnatun saghiratun*) that possessed gardens (*basātīn*), springs (‘*uyūn*’), mills (*ārha*’),<sup>39</sup> as well as villages (*qura*) (Ibn Shaddād 423). The four villages making up the town are named and include Tell al-Judaidah (AS 176). These various rather insubstantial sites likely depended on (and even comprised) Arṭāh (Jacquot 1931: 442).

Another noticeable characteristic was a return to occupying large multi-period tells, which were formerly occupied until the Hellenistic period. AS 28, near the Yaghra river was an example of this pattern. The site had Late Hellenistic and Middle Islamic but no Roman through Early Islamic occupation. The tell sites were often small, similar to the few Late Roman and Early Islamic scanty occupations of tells as shown by the excavated settlement of the Islamic period at Çatal Höyük which was restricted to only one part of the multi-period mound. Often villages would incorporate tells as a defensible high point, which was walled and offered refuge for villagers and their livestock. Although the investigation of the post-Early Islamic settlement in the Amuq is hampered by the fact that many modern villages are

<sup>39</sup> In 2005, the AVR P survey confirmed numerous fragments of mills and other architectural remains in the gardens of modern houses.



built over the Middle Islamic sites, the differences separating the Early Islamic patterns from the Middle Islamic and modern-day continuities are evident. The protective potential of these sites is emphasized rather than their military nature by virtue that many are found in the plain near villages and towns and not exclusively along a borderline (Glick 1995: 17-18).

Newly founded sites tended to be fortified upland castles constructed in this period. During this period, several important forts were constructed and occupied by Byzantines, Muslims, Crusaders, and Armenians such as Baghrās and Darbassāk. The castle of Baghrās (AS 247) was known historically as a major site guarding the Belen pass. It was built in the tenth century although its construction has been noted as primarily Crusader with possibly later Mamlūk or Armenian additions (Edwards 1983: 415, 418-419; Sinclair 1990: 266-271). Along with the presence of the Middle Islamic upland castle, the Late Roman and Early Islamic lowland site continued to be occupied. Ibn Hawqal (169) and Idrisi (656), writing in the tenth and early twelfth centuries respectively, mentioned Ḥiṣn Baghrās and included a Friday Mosque (*masjid jami'*) and large population. The castle was expanded in the Middle Byzantine period before entering the zenith of its occupation, the Frankish period. After the Mamluk conquest in 1268 the fortress became a border point between the Mamluks and the Cilician Armenians (Lawrence 1978: 39-46; Edwards 1983: 416-418). Although a complete surface survey could not be accurately done within the well-preserved and precariously situated castle, Early and Middle Islamic transitional tenth and eleventh century pottery was found including molded buffware and colorsplash sgraffiato sherds, suggesting a presence (rather than dating the construction) in the tenth century and a move to an upland occupation from the lowland town. The types and variety of pottery found at Baghrās including numerous Port St. Symeon wares (as compared to other sites) and imported Byzantine sgraffiato pottery, demonstrate that it continued as an important site. At the lower town on the plain (AS 248), pottery of the Early, Middle, and Late Islamic periods further suggests certain continuity. Abū al-Fidā' in the fourteenth century described springs, gardens, and fields all around the site (Abū al-Fidā' 259). It is not altogether clear whether he was referring to the castle or the lower town. Several architectural features were discerned just below the castle on the slopes including a bathhouse and gate associated with twelfth-fourteenth century Middle Islamic pottery. Watermills found in the vicinity of the khan show that the area was still being used and perhaps relatively self-sufficient. This is an important point as it shows that construction of the castle was not at the expense of the lower town, but rather part of an overall complex that added a level of defense and refuge for the lower town dwellers.

The nearby site of Darbassāk (or Darbsāk, classical Trapezon, Crusader Trapezac, modern Turkish Terbezek, AS 346/Beyazid-i Bestami), further north along the Amanus range and near the site of Celanlı, is quite similar to Baghrās. It is likely that this site also included a large castle, a mosque and gardens (Abū al-Fidā' 261). Darbassāk was also built in the Crusader Period and refortified by the Armenians (Edwards 1983: 253). Measurements and collection were difficult as the site today is covered over by a heavily visited modern pilgrimage shrine complex (*türbe*), but Middle Islamic pottery was apparent on the surface and also noted by Sinclair (1990: 297). Another important upland site was Cakallı Karakol (AS 246), which featured the largest Middle Islamic assemblage of ceramics found on the survey including Raqqa pottery, cooking pots, Byzantine imported sgraffiato pottery and Port St. Symeon ware.

It would seem that these combinations of lower towns with tells or mountain fortified settlements, were of a single type, self-sufficient to a point, and, in effect, were part of a contemporary process known pervasively in the western Mediterranean as *incastellamento*. Within the literature of the Islamic geographers, the prominence given to these sites is interesting. Many of these authors lived at the end of the 'Abbasid period when the frontier changed hands frequently from Byzantine to Crusader to Muslim and defensible towns and

castles were built. In the Middle Islamic Period, many previously Roman/Late Roman sites were mentioned in texts as Islamic forts (*ḥuṣūn* sing. *ḥiṣn*), such as Baghrās and Darbassāk, due to their strategic location on the frontier as transportation nodes along military or trade routes. However, it is important to note that textual descriptions of sites, particularly in the *thughūr*, often referred to towns as *ḥiṣn*, such as Ḥiṣn ‘Imm (Imma). As such the ambiguous meaning of the term as a fortified frontier site in the most general sense suggests that during this period towns and villages were either fortified themselves, or included a fortified element such as a fort, tell, or castle.

### ***Discussion: The Middle Islamic Period***

Whereas the ceramic assemblages suggest a decline in the number of settlements with the transition from the Early to Middle Islamic period, there was an increase in settlement in the later part of the Middle Islamic period (perhaps to be equated with the period of Frankish rule). Similar developments can be seen in other regions. Surveys in the Balikh Valley (Bartl 1996: 335), the Qoueiq Valley (Bernus-Taylor 1980: 473; Vorderstrasse in preparation), and the North Jazira area (Wilkinson and Tucker 1995: 71) see a decline in the 11th century, and an upturn in the 12th and 13th centuries. In the Lower Karababa Basin Survey, the increase in settlement begins in the 11th and 12th centuries (Wilkinson 1990: 129). A new wave of nomadic tribes came between the Early and Middle Islamic periods (mid tenth – mid eleventh) leaving a century of many abandoned sites and no new sedentary communities. However, by the Middle Islamic period (mid 11th) settlement and demography had reached a second peak, where settled (and probably ethnically mixed) communities had agglomerated into towns with upland fortifications, the process of *incastellamento*. The reasons are due to a combination of a politically and economically unstable landscape, and adaptive strategies to changing environmental and economic (resource) conditions. These show a shift to subsistence strategies that were more immediate and protected, differing greatly from the large scale economic entrepreneurial markets of the Roman and Late Roman periods or the continuing extensive maintenance of irrigation networks in the Early Islamic periods.

## **The Late Islamic Period (14th to 19th century)**

*Tasha Vorderstrasse*

The Late Islamic period in the Amuq Plain is the period when the region was under the sway of the Mamluks and the Ottomans. It is a period when the region is generally seen as going into serious decline. The city of Antioch was said to have been largely destroyed by the Mamluks, and countless travelers spoke about how much reduced it was from its former self. The Arab writers of the time, such as Ibn Battuta, however, speak of a prosperous city (although it lacked walls) (Vorderstrasse 2005a: 136-137). Nevertheless, it is evident that there was a significant downturn in settlement in the region when compared with the Frankish period. Of all sites, 15% can be identified as certainly Late Islamic in date, which is a drop of almost two thirds from the 125 sites of the previous period. Only a small number of artifacts can definitely be attributed to this period and the majority of them date to the later part of the period. The question is whether or not this is a true reflection of the settlement in this period. Our understanding of unglazed pottery in this period is limited, and as a result, we could be underestimating the number of settlements. It is unfortunate that no Mamluk or Ottoman excavations in the region have been published to shed more light on unglazed pottery typologies.

The period can be divided into two phases: Late Islamic I (14th-16th centuries, corresponding to the period of Mamluk control) and Late Islamic II (16th-19th centuries, i.e. the Ottoman period). In addition to archaeological materials, historical and hitherto barely studied historical geographical documents provide evidence about this period. The discussion of the Late Islamic period presents preliminary conclusions on the settlement dynamics, but primarily aims at presenting potential avenues of research.

### ***The Late Islamic I period (14th-16th century)***

The Late Islamic I period can be equated to the Mamluk occupation of the Amuq Plain. The information for the region under the Mamluks is scanty. Only a few coins have been found in the area, and there is a distinct lack of pottery that can be definitely dated to this period. It is possible that recognition of pottery of this phase is hampered by the fact that Middle Islamic types continued to be produced after the Mamluk conquest of the Frankish territory. Port St. Symeon pottery, for example, has been found in post-1268 contexts in Lebanon, where the dating of the site is not in any doubt (Vorderstrasse in press). Therefore, the suggestion is possible that many of the sites discussed in the previous section continued to be inhabited, probably into the 14th century.

The site of Muratpaşa (AS 25) was occupied in this period, as demonstrated by (unpublished) inscriptions which point to activities of the Sultan İbnāl (d.1461) in this area.

### ***The Late Islamic II period (16th-19th century)***

The evidence for the Late Islamic II period, which can be equated with the Ottoman occupation of the region, is more extensive, particularly for the 19th century. The archaeological materials found are primarily late Ottoman and consists of pipes and rouletted ware (fig. 18). This type of pottery, usually decorated with square or occasionally diamond rouletting is often found in association with 19th century pipes, which gives an associated date.<sup>40</sup> Only a few fine wares can be assigned to this period. Iznik and Kütahya wares are so far absent in the survey assemblages, and could have been out of reach of the average villager. At al-Mina, for example, the most common types of pottery that could be identified were monochrome glazed wares and 19th century Çannakale wares, which were relatively cheap at the time (Vorderstrasse 2005a: 148).

The majority of the Late Islamic settlements are small and scattered across the Amuq plain (fig. 19). There are a few places where one can observe clusters of sites, namely in the southern part of the plain and four sites in the north (AS 16, 210, 211, 215). In addition, there are several settlements which are located close to one another: AS 105 and 200 and AS 107 and 171. The overall impression is one of a limited number of small settlements. In Ottoman Cyprus, Given observed the importance of water sources for the placement of settlement as many villages were located alongside rivers. In addition, security and the presence of arable land was also important (Given 2000: 215). In the Amuq, however, this pattern cannot be observed as the majority of villages were not located along rivers.

The castle of Baghrās (AS 247), so important in the Middle Islamic period, may have seen a period of decline in the 14th century (Lawrence 1978: 47), although this is debated (Sinclair 1990: 266). During the Ottoman period the castle experienced more activity. There is some evidence from the castle itself that points to Ottoman occupation, but the vast bulk comes from Baghrās khan (AS 248), where the survey indicates that there was an increase in occupation from the Middle to the Late Islamic period. The foundation and part of the structure are still standing and CORONA satellite imagery showed a clear rectilinear structure. The khan can be identified with Khan Karamurt which Sinclair (1990: 350) states

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<sup>40</sup> I would like to thank Asa Eger and Katie Johnson for their assistance with this material.

was erected on orders of the Ottoman vizier Hasan Paşa after 1704. However his inscription implies that the khan was part of a larger town. There were also buildings that included a castle, mosque, double hammam for men and women, Koran school, imaret (canteen), shops, houses for the castle garrison and mosque attendants, and a bridge nearby. The khan was apparently built to control bandit activity on the Amanus and records state that it was finished by 1729 (and repaired then). Above the southern entrance were rooms, indicating a two story structure, and barley and hay stores. A late 19th century traveler noted that the castle was 100 m from the khan. This is too close to match the distance with the preserved Baghrās Castle and may correspond with the architectural features (bathhouse and gate) observed by AVRPA on the slopes below the castle, suggesting a continuous landscape of khan on the plain, structures on the slopes, and castle.

Other sites also have signs of occupation in the Ottoman period, implying a continuation from the Middle Islamic period. At Muratpaşa (AS 25), Sinclair mentions that there is a bridge that was said to date to the time of Ottoman Sultan Ahmed I (1603-1617) and an inscription on the bridge dates to 1848. Circassians were settled in Imma (Yenişehir, AS 345) in 1877 and 1878 (Sinclair 1990). In addition, a mill house in Imma is dated to the Late Islamic period (Sinclair 1990: 296), re-using the reservoir and canals that originated in the Roman period. So far, no Late Islamic pottery has been attested from the site.

### ***Historical Context of Settlement***

The settlement evidence from the region suggests that the Amuq Plain went into serious decline after the end of the Frankish period. This would tend to support contemporary European travelers who came to the region, although it may not be as serious as was suggested as their laments for the fate of Antioch might suggest (Vorderstrasse 2005a: 138). One reason for the decline in settlement may have been the fact that the region was no longer the focus of attention of either the Mamluks or the Ottomans, apart from extracting heavy taxes. A possibly resulting increase in nomadic settlement in the area would be difficult to observe in the survey data.

An insight into how the Amuq Plain was viewed in 16th century Ottoman court circles is provided by a drawing in a manuscript recording the first Persian campaign of Sultan Süleyman in 1534-36, composed by Nasuh Matrakçı (Istanbul University Library, Ms. 5964). This manuscript contains a number of pictures representing towns, villages, and the countryside. It is clear that the representations in the manuscript are reasonably accurate, although there was a certain amount of standardization (Taeschner 1956: 53; Taeschner 1962: 55; Yurdaydin 1976: xix-xx, xxii, 151, 153-154 with complete color facsimile of the manuscript). It is only recently that these miniatures have been recognized as being important for settlement studies of a particular region (Lefort 2003). The miniature in question has not previously been recognized as a depiction of the Amuq Plain and the Lake of Antioch. The folio (reproduced in Yurdaydin 1976 in color as Fol. 107b) depicts a lake being fed by the branch of one river, while the second branch continues to the southwest, where it is crossed by a bridge. The text next to the bridge reads: Göl-i Avam, while the text below notes that this is a bridge over the Orontes (Taeschner 1962: 92). The lake is full of birds and there are fish swimming in the river and river birds wading. On the plain itself there are deer and trees. The overall picture is one of a natural paradise. In addition, there are a number of mounds that have been drawn. The overall manuscript is quite accurate from a topographical point of view, so it is possible that the artist is actually trying to depict ancient mounds in the Amuq Valley. What is remarkable, however, is that there is no sign of any settlement either around the lake or by the bridge over the Orontes (presumably Demirköprü, AS 297).

The evidence from Ottoman tax registers shows, in agreement with the AVRPP survey data, that the region was not quite so empty. In the Amuq and neighbouring Aleppo countryside, peasants largely worked lands owned by others and then received proceeds from their labor after the taxes on the profits had been taken. The types of products that they would have grown include wheat, olive trees, vines, fruit-bearing trees, garden produce, and legumes (Murphey 1987; Marcus 1989: 13, 17; Venzke 1997). There is a rich source of information here about the rural countryside from the 16th to 19th century, which so far has barely been tapped into (cf. Given 2000 for a study on Cyprus).

Whereas most reports by European travelers tend to be written in a highly impressionistic vein and do not really inform us about the specifics of village life in the Amuq Valley in the Ottoman period, one report stands out by its wealth of information. Martin Hartmann visited northern Syria in 1882-1883 and recorded the topography of the region in considerable detail (Hartmann 1892; Hartmann 1894). Despite the importance of this survey, Hartmann's work has largely been neglected to date (the exception are Arnold 1998 and Vorderstrasse 2005a: 142-143, 146). Braidwood only mentions Hartmann as being valuable for his map and "its contributions to nomenclature" (Braidwood 1937: 2, no. 1). Hartmann's studies of north Syria include not only lists of settlements (accompanied by detailed maps) but also a discussion of the number of households per settlement, the language that they spoke, their religion, and their ethnicity. This means that his topographical studies can bring us considerably closer to understanding what was occurring in the Amuq Plain in the Ottoman period. From Hartmann we know that the region was inhabited by Arabs, Turkmen, and Armenians who spoke a variety of languages including Arabic, Turkish, and Armenian and were Muslims, Christians, and Jews. At the present stage of research, initial steps are made to correlate Hartmann's information with survey data from Braidwood as well as AVRPP.

Jisr Hadid (Demirköprü, AS 297), is described by Hartmann as being made up of 40 households of Arabic-speaking Muslims (Hartmann 1894: 504, no. 3). Late Islamic material was recorded by the AVRPP survey and there is also an Ottoman inscription at the site. According to Sinclair, this inscription records that the bridge (which originated in the Roman period) was rebuilt in 1838 (Sinclair 1990: 295). This is around the same time as the aforementioned 1848 Muratpaşa bridge inscription. Another village recorded by Hartmann where Late Islamic material has been found is Eski Enek (AS 319). The site, located in the Jebel al-Aqra, is extensive and has a large number of standing remains (Casana/Wilkinson 2005a: 44). Pottery recorded by AVRPP dates from the Middle Islamic and Late Islamic periods. Hartmann states that the site of Eski Enek contained the homes of 80 Arabic speaking Muslim families (Hartmann 1894: 505, no. 33). The site of Ağa Çiftliği (AS 348), a walled courtyard farmhouse with an Ottoman inscription above the gate, seems to be Hartmann's Tschiftlik reschid Agha. In this case Hartmann's description that it was inhabited by 40 families (1894: 505, no. 80), suggests that perhaps the farmhouse included smaller homes that were dependents under its protection as workers or independent land owners. In other cases it is more difficult to match survey data and Hartmann's claims. Some villages that were found inhabited by Hartmann did not yield Late Islamic pottery when they were surveyed. This may well be due to the fact that the survey did not investigate the interior spaces of every village, many of which would probably have traces of the 19th century remains.

Problems of correlating archaeological and historical information are to be expected, of course, but further research that integrates the archaeological materials, tax registers and Hartmann's geographical survey could develop new ways to elucidate the dynamics of settlement and rural economy in the Late Islamic period.

## **Concluding remarks**

*Fokke Gerritsen*

For reasons explained in the introduction, this article has not treated the Bronze Age and Iron Age landscapes of the Amuq Valley and surrounding uplands. Much more could have been said about each of the preceding and subsequent periods. One of the aims of this article, however, has been to move across the major chronological boundaries that customarily separate the pre-classical Near East, the Hellenistic, Roman and Late Roman/Byzantine periods, and the Islamic periods into discrete fields of research. A regional approach, and especially one with a landscape-archaeological study at its core, is well suited to break down these invisible barriers.

Without downplaying the unique character of each period, and the specific expertise needed to further our understanding of each period, we contend that a long-term perspective can provide a context to many developments and brings them into sharper focus. It works from the premise that communities always have to make a living in landscapes that had been created through the interaction between previous human generations and the environment. In the case of the periods discussed here, this was clearest in the Early Islamic Period. At this time the expansion of the marshes in the valley center prompted new lifestyles and produced new settlement patterns, but was ultimately the result of the exploitation of the uplands and the soil erosion that had been caused by it since the Roman Period.

This same example serves to demonstrate a second feature of the approach taken by this study, in addition to developing a long-term perspective. This is the view that the settlement patterns inferred from the survey data have to be studied in the context of broader political-historical, economic and cultural developments. Whereas it could seem that new lifestyles in the Early Islamic Period were dictated by the changing environment, it is clearly relevant that the region became part of the frontier zone of an expanding political and religious entity at this time, and that new groups may have moved in from marshland environments elsewhere.

With the possible exception of the pre-Bronze Age Periods, the communities of the Amuq Valley were never isolated from larger social and political entities, and frequently incorporated in geographically extensive, powerful and highly centralized empires. Sometimes the Amuq Region was situated close to the center of power and administration, sometimes rather towards the margins. But in all periods external factors, including taxation systems, imperially imposed land tenure practices, economic market forces, long-distance road systems, or even religious movements, affected the way in which local communities made a living and organized their surroundings. Even though it is frequently textual information that allows us to outline these factors, archaeology like no other discipline is suited to disentangle the different external and internal, global and local dimensions that shape cultural landscapes over millennia.

## Bibliography

### *Ancient and medieval sources*

Abu al-Fidā, *Kitāb taqwīm al-buldān*. Arabic text in: M. Reinaud and M. le Baron MacGuckin de Slane, *Géographie d'Aboulfēda. Texte Arabe publié d'après les manuscrits de Paris et de Leyde aux frais de la Société Asiatique*. Paris, Imprimerie Royale, 1840.

Balādhurī, Aḥmad ibn Yahyā, *Futūḥ al-buldān*. Beirut, Dār al-Nashr lil-Jāmiʿiyyīn, 1957-1958.

Cassius Dio, *Storia Romana*; translation G. Norcio. Milano, 1995.

Diodorus Siculus, *Bibliotheca Historica*; translation John Skelton. London, 1956-7.

Ibn Ḥawqal, *Kitāb ṣūrat al-ārḍ*. Beirut, Manshūrāt Dār Maktabat Al-Ḥayā, 1964.

Ibn Khurradadhbih, *Kitāb al-masālik al-mamālik*. Leiden, Brill, 1889.

Ibn Shaddād, *Al-aʿlāq al-khaṭīra*. Damascus, Mānshūrāt wa Zāra al-Thaqāfa, 1956 (1991).

Idrīsī, *Kitāb nuzhat al-mushtāq fī Ikhtirāq al-āfāq*. Cairo, al-Thaqafa al-Denia Bookshop, 1990.

Jerome, *Vita Malchi (trois vies de moines: Paul, Malchus, Hilarion)* / Jérôme; introduction P. Leclerc, E.M. Morales, A. De Vogüé; commentary E.M. Morales; translation P. Leclerc; translation notes E.M. Morales and P. Leclerc. Paris, 2007.

Libanius, *Opera*; edited by H. Förster, 12 vols; Leipzig, 1903-1923.

Muqaddasī, *Aḥsan al-taqāsīm fī-maʿrifat al-āqālīm*; edited by M.J. de Goeje. Bibliotheca Geographorum Arabicorum 3. Leiden, Brill, 1967.

Orosius, *Histoires (contre les païens)* / Orose; edition and translation M.-P. Arnaud-Lindet. Paris, 1991.

Procopius, *Of the Buildings of Justinian*; translation A. Stewart; Palestine Pilgrims' Text Society 2; New York, 1971.

Strabo, *Geographica*; translated by H. L. Jones. Cambridge, 1932.

Theodoret, *Historia Religiosa. Histoire des moines de Syrie*; edition and translation P. Canivet and A. Leroy-Molinghen; Sources Chrétiennes 234-235, 1979.

Yāqūt, *Muʿjam al-buldān*. Beirut: Dār Sādir, 1955-1957.

Yāqūt, *Marāʾid al-Ittilāʿ al-Asmāʾ al-Amkina wa al-Biqāʿ*, (by ʿAbd al-Muʿmin ibn ʿAbd al-Ḥaqq al-Baghdādī). Beirut: Dār al-Jīl, 1992.

### ***Modern sources***

Ainsworth, W.F., 1842 - *Travels and Researches in Asia Minor, vol. 1*. London.

Algaze, G., ed., 1991 - *Town and Country in Southeastern Anatolia, vol. 2. The Stratigraphic Sequence at Kurban Höyük*. Chicago: Oriental Institute Publications 110.

Algaze, G., R. Breuninger and J. Knudstad, 1994 - The Tigris-Euphrates Archaeological Reconnaissance Project: Final Report of the Birecik and Charchemish Dam Survey Areas. *Anatolica* 20: 1-96.

Avni, G., 1996 - *Nomads, Farmers, and Town-Dwellers: Pastoralist-Sedentist Interaction in the Negev Highlands, Sixth-Eighth Centuries CE*. Jerusalem: Israel Antiquities Authority.

Balossi, F., 2004a – The Pottery Production of Levels XXVII-XXVI. In: I. Caneva and V. Sevin, eds: *Mersin-Yumuktepe. A Reappraisal*, 135-141. Lecce: Università degli Studi.

Balossi, F., 2004b - New Data for the Definition of the DFBW Horizon and Its Internal Developments: The Earliest Phases of the Amuq Sequence Revisited. *Anatolica* 30: 109-149.

Bar-Kochva, B., 1976 - *The Seleucid Army*. Cambridge.

Bartl, K., 1993/94 - The Balih Valley, Northern Syria, During the Islamic Period. Remarks Concerning the Historical Topography. *Berytus* 41: 29-38.

Bartl, K., 1996 - Balih Valley Survey: Settlements of the Late Roman/Early Byzantine Period. In: K. Bartl and S.R. Hauser, eds: *Continuity And Change in Northern Mesopotamia from the Hellenistic to the Early Islamic Period*, 333-348. Berlin: Berliner Beiträge zum Vordern Orient 17.

Bavant, B. and D. Orssaud, 2001 - Stratigraphie et typologie. Problèmes posés par l'utilisation de la céramique comme critère de datation: l'exemple de la fouille de Dêhès. In: E. Villeneuve and P.M. Watson, eds: *La céramique Byzantine et proto-Islamique en Syrie-Jordanie (IV<sup>e</sup>-VIII<sup>e</sup> siècles apr. J.-C.)*, 33-48. Beirut: Institut Français d'Archéologie du Proche-Orient 20.

Bernus-Taylor, M., 1980 - The Islamic Glazed Pottery. In: J. Matthers, ed.: *The River Qoueiq. Northern Syria and its Catchment: Studies Arising from the Tell Rifa'at Survey 1977-79*, 473-498, Oxford: BAR International Series 98.

Biscop, J.L., 1997 - *Deir Dêhès, monastère d'Antiochène. Étude architecturale*. Beirut: Institut Français d'Archéologie du Proche-Orient.

Braidwood, R., 1937 - *Mounds in the Plain of Antioch*. Chicago: Oriental Institute Publications 48.

Braidwood, R. J. and L. S. Braidwood, 1960 - *Excavations in the Plain of Antioch, vol. 1. The Earlier Assemblages, Phases A-J*. Chicago: Oriental Institute Publications 61.



Bernbeck, R., S. Pollock and C. Coursey, 1999 - The Halaf Settlement at Kazane Höyük. Preliminary Report on the 1996 and 1997 Seasons. *Anatolica* 25: 109-144.

Butler, H.C., 1929 - *Churches in Syria, Fourth to Seventh Centuries*. Ed. and compl. by E. Baldwin Smith. Princeton.

Callot, O., 1984 - *Huilleries antiques de la Syrie du Nord*. Paris.

Campbell, S., E. Carter, E. Healey, S. Anderson, A. Kennedy and S. Witcher, 1999 – Emerging Complexity on the Kahramanmaraş Plain: The Domuztepe Project 1995-1997. *American Journal of Archaeology* 103: 395-418.

Cappel, A.J., 1994 - The Byzantine Response to the ‘Arb. *Byzantinische Forschungen* 20: 113-131.

Carter, E., S. Campbell and S. Gauld, 2003 - Elusive Complexity: New Data from Late Halaf Domuztepe in Southcentral Turkey. *Paléorient* 29(2): 117-134.

Casana, J., 2003 - *From Alalakh to Antioch*. Unpublished PhD dissertation, University of Chicago.

Casana, J., 2007 - Structural Transformations of Settlement Systems in the Northern Levant. *American Journal of Archaeology* 111: 195-221.

Casana, J. and A.R. Gansell, 2005 – Surface Collection, Off-site Survey, and Floodplain Development at Tell Atchana. In: K.A. Yener, ed.: *The Amuq Valley Regional Projects, vol. 1, Surveys in the Plain of Antioch and Orontes Delta, Turkey, 1995-2002*, 153-169. Chicago: Oriental Institute Publications 131.

Casana, J. and T.J. Wilkinson, 2005a – Settlement and Landscapes in the Amuq Region. In: K.A. Yener, ed.: *The Amuq Valley Regional Projects, vol. 1, Surveys in the Plain of Antioch and Orontes Delta, Turkey, 1995-2002*, 25-98. Chicago: Oriental Institute Publications 131.

Casana, J. and T.J. Wilkinson, 2005b – Appendix A, Gazetteer of Sites. In: K.A. Yener, ed.: *The Amuq Valley Regional Projects, vol. 1, Surveys in the Plain of Antioch and Orontes Delta, Turkey, 1995-2002*, 203-280. Chicago: Oriental Institute Publications 131.

Chapot, J., 1902 - Antiquités de la Syrie du Nord. *Bulletin de correspondance hellénique* 26: 161-208.

Creekmore, A., 2007 - The Upper Tigris Archaeological Research Project (UTARP): A Summary and Synthesis of the Late Chalcolithic and Early Bronze Age Remains from the First Seasons at Kenan Tepe. *Anatolica* 33:75-128.

Conrad, L. 2001 - Ibn Butlān in *Bilād al-Shām*. The Career of a Traveling Christian Physician. In: D. Thomas, ed.: *Syrian Christians under Islam: The First Thousand Years*, 131-158. Leiden.

De Giorgi, A., 2007 - The Formation of a Roman Landscape. The Case of Antioch. *Journal of Roman Archaeology* 20: 283-299.

De Ligt, L., 1993 - *Fairs and Markets in the Roman Empire. Economic and Social Aspects of Periodic Trade in Pre-Industrial Society*. Amsterdam.

De Vogüé, M., 1865-77 - *Syrie centrale. Architecture civile et religieuse de 1er au VIIe siècle*. 2 vols. Paris: J. Baudry.

Decker, M., 2001 - Food for an Empire. Wine and Oil Production in North Syria. In: S. Kingsley and M. Decker, eds: *Economy and Exchange in the East Mediterranean during Late Antiquity. Proceedings of a Conference at Somerville College, Oxford, 29th May, 1999*, 69-86. Oxford.

Diebold, B., 2004 - Excavations at Tell Kurdu 2001: The Pottery. In: R. Özbal et al.: *Tell Kurdu Excavations 2001*. *Anatolica* 30: 52-55.

Downey, G., 1950 - Aurelian's victory over Zenobia at Immae, A.D. 272. *Transactions and Proceedings of the American Philological Association* 81: 57-68.

Downey, G., 1961 - *A History of Antioch in Syria from Seleucus to the Arab Conquest*. Princeton.

Duncan Jones, R.P., 2004 - Economic change and the transition to Late Antiquity, in S. Swain and M. Edwards, eds: *Approaching Late Antiquity. The Transformation from Early to Late Empire*, 20-52. Oxford.

Edwards, R., 1983 - Bağras and Armenian Cilicia: A Reassessment. *Revue des études arméniennes* 17: 415-455.

Foss, C., 1997 - Syria in Transition, A.D. 550-750. An Archaeological Approach. *Dumbarton Oaks Papers* 51: 189-269.

French, D., 1985 - Mersin and Tell Esh-Sheikh. In: M. Liverani, A. Palmieri and R. Peroni, eds: *Studi Di Paletnologia in Onore Di Salvatore M. Puglisi*, 265-271. Roma.

French, D., 1990 – Gaziantep ve Hatay Müzelerinde Bulunan Sakçegözü ve Tell esh-Sheikh Kazılarının Malzemesi. *Araştırma Sonuçları Toplantısı* 7: 435-441.

Friedman, E.S., C. Reichel, 1995 - Tell el-Judeidah 1995: The Amuq F and G horizons revisited. In: K.A. Yener et al.: *The Oriental Institute Amuq Valley Projects, 1995*. *Anatolica* 22: 67-70.

Garnsey, P. 1988 - *Famine and Food Supply in the Graeco-Roman World. Responses to Risk and Crisis*. Cambridge.

Gatier, P.-L. 1994 - Villages du Proche-Orient protobyzantin (4ème -7ème s.). Étude régionale. In: G.R.D. King and A. Cameron, eds: *The Byzantine and Early Islamic Near East, vol. 2. Land Use and Settlement Patterns*. Princeton: The Darwin Press.

Given, M. 2000 – Agriculture, Settlement, and Landscape in Ottoman Cyprus. *Levant* 32: 209-230.

Glick, T.F. 1995 - *From Muslim Fortress to Christian Castle: Social and Cultural Change in Medieval Spain*. Manchester.

Gregory, S., 1997 - *Roman Military Architecture on the Eastern Frontier*, 3 vols, Amsterdam.

Haase, C.-P. 1983 - Ein archäologischer Survey im Gabal Sbet und im Gabal al-Ahas. *Damaszener Mitteilungen* 1: 69-76.

Haines, R.C., 1971 - *Excavations in the Plain of Antioch, vol. 2. The Structural Remains of the Later Phases*. Chicago: Oriental Institute Publications 95.

Hartmann, M., 1892 - Das Liwa el-Ladkije. *Zeitschrift des Deutschen Palästina-Vereins* 14: 151-255.

Hartmann, M., 1894 - Das Liwa Haleb (Aleppo) und ein Teil des Liwa Dschebel Bereket. *Zeitschrift der Gesellschaft für Erdkunde zu Berlin* 29: 142-188, 475-550.

Hood, S., 1951 - Excavations at Tabara el Akrad, 1948-1949. *Anatolian Studies* 51:113-147.

Ingholt, H., 1934 - *Rapport préliminaire sur la première campagne de Hama*. Copenhagen.

Iwasaki, T., H. Nishino and A. Tsuneki, 1995 – The Prehistory of the Rouj Basin, Northwest Syria. A Preliminary Report. *Anatolica* 21: 143-187.

Iwasaki, T. and A. Tsuneki, 2003 - *Archaeology of the Rouj Basin: A Regional Study of the Transition from Village to City in Northwest Syria*. Vol. 1. Tsukoba: Al Shark Studies for West Asian Archaeology.

Jacquot, P., 1931 - *Antioch centre de tourisme*. Paris: Comité de tourisme d'Antioche.

Kennedy, H., 1985 - The Last Century of Byzantine Syria: A Reinterpretation. *Byzantinische Forschungen* 10: 141-183.

Kennedy, D. and N. Riley, 1990 - *Rome's Desert Frontier from the Air*. Austin.

Lawrence, A.W., 1978 - The Castle of Baghras In: T.S.R. Boase, ed.: *The Cilician Kingdom of Armenia*, 35-49. New York: St. Martin's Press.

LeFort, J., 2003 - Les miniatures de Matrakçi. In: B. Geyer and J. LeFort, eds: *La Bithynie au moyen âge*, 99-112. Paris: Réalités Byzantines 9.

LeStrange, G., 1890 - *Palestine under the Moslems. A Description of Syria and the Holy Land from A.D. 650 to 1500*. London: Alexander P. Watt.

Liebeschuetz, J.H.W.G., 1972 - *Antioch. The City and the Imperial Administration in the Later Roman Empire*. Oxford.

Ma, J., 1999 - *Antiochos III and the cities of Western Asia Minor*. Oxford.

MacAdam, H.I., 2002 - Epigraphy and Village Life in Southern Syria During the Roman and Early Byzantine Periods. In: H.I. MacAdam, ed.: *Geography, Urbanisation and Settlement Patterns in the Roman Near East*, 104-115. Aldershot: Ashgate.

McLean Harper, G., 1938 - Village Administration in the Roman Province of Syria. In: T. Frank, ed.: *An Economic Survey of Ancient Rome*, vol. 4, 105-168. Baltimore.

Mackensen, M., 1984 - *Resafa I. Eine befestigte spätantike Anlage vor den Stadtmauern von Resafa*. Mainz am Rhein: Philipp von Zabern.

Madelung, W., 1986 - Apocalyptic Prophecies in Hims in the Umayyad Age. *Journal of Semitic Studies* 31: 141-185.

Magness, J., 2003 - *The Archaeology of the Early Islamic Settlement in Palestine*. Winona Lake: Eisenbrauns.

Marcus, A., 1989 - *The Middle East on the Eve of Modernity. Aleppo in the Eighteenth Century*. New York.

Meinecke, M., 1991 - Raqqa on the Euphrates. Recent Excavations at the Residence of Harun ar-Rashid. In: S. Kerner, ed.: *The Near East in Antiquity. German Contributions to the Archaeology of Jordan, Palestine, Syria, Lebanon, and Egypt*, vol. 2, 17-32. Amman: Goethe Institute and Al Kutba.

Mellaart, J., 1981 - The Prehistoric Pottery from the Neolithic to the Beginning of Early Bronze IV (C. 7000-2500 B.C.). In: J. Matthers, ed.: *The River Qoueiq. Northern Syria and its Catchment: Studies Arising from the Tell Rifa'at Survey 1977-79*, 313-326. Oxford: BAR International Series 98.

Millar, F., 1993 - *The Roman Near East: 31 BC - AD 337*. Cambridge.

Murphey, R., 1987 - *Regional Structure in the Ottoman Economy. A Sultan's Memorandum of 1636 A. D. Concerning the Sources and Uses of the Tax-Farm Revenues of Anatolia and the Coastal and Northern Portions of Syria*. Wiesbaden: Near and Middle East Monographs New Series 1.

Northedge, A., A. Bamber and M. Roaf, 1988 - *Excavations at 'Āna, Qal'a Island*. Warminster: British School of Archaeology in Iraq and the Directorate of Antiquities.

Özbal, R., 2006 - *Households, Daily Practice and Cultural Appropriation at Sixth Millennium Tell Kurdu*. Unpublished PhD dissertation, Northwestern University.

Özbal, R., F. Gerritsen, B. Diebold, E. Healey, N. Aydın, M. Loyet, F. Nardulli, D. Reese, H. Ekstrom, S. Sholts, N. Mekel-Bobrov and B. Lahn, 2004 - Tell Kurdu Excavations 2001. *Anatolica* 30: 37-108.

Pearce, J., 2000 – The Late Chalcolithic Sequence at Hacinebi Tepe, Turkey. In: C. Marro and H. Hauptmann, eds: *Chronologies des pays du Caucase et de l'Euphrate aux IVe-IIIe millénaires*, 115-144. Istanbul: Institut Français d'Études Anatoliennes.

Poidebard, A., 1929 - Coupes de la chaussée romaine Antioche-Chalcis, *Syria* 10: 22-29.

Pollock, S. and C. Coursey, 1995 - Ceramics from Hacinebi Tepe: Chronology and Connections. *Anatolica* 21: 101-141.

Pournelle, J. R. 2003 - *Marshland of Cities: Deltaic Landscapes and the Evolution of Early Mesopotamian Civilizations*. Unpublished PhD dissertation, University of California at San Diego.

Redford, S., 1998 - *The Archaeology of the Frontier in the Medieval Near East: Excavations at Gritille*. Philadelphia: University Museum Publications.

Rotroff, S.I., 1997 – *Hellenistic Pottery. Athenian and Imported Wheelmade Tableware and Related Material*. Princeton: The Athenian Agora 29.

Ruggini, L., 1961 - *Economia e società nell'Italia annonaria*, Milan.

Sack, D., 1996 - *Resafa IV. Die Große Moschee von Resafa – Rusafat Hisam*. Mainz am Rhein: Philipp von Zabern.

Schwartz, G., 1988 – *A Ceramic Chronology from Tell Leilan, Operation I*. New Haven: Yale University Press.

Schwartz, G., H. Curvers, F. Gerritsen, J. MacCormack, N. Miller and J. Webber, 2000 - Excavation and Survey in the Jabbul Plain, Western Syria: Umm el-Marra Project, 1996-1997. *American Journal of Archaeology* 104: 419-462.

Sève, L., 2004 - Peuple d'Antioche et dynastie Seleucide. In: Antioche de Syrie. Histoire, images et traces de la ville antique. *Topoi Supplement* 5: 21-41.

Sinclair, T.A., 1990 - *Eastern Turkey: An Architectural and Archaeological Survey, vol. 4*. London: The Pindar Press.

Slane, K.W., 1997 - The Fine Wares. In: S.C. Herbert, ed.: *Tel Anafa II*, 247-401. Ann Arbor.

Sodini, J.-P., G. Tate, B. and S. Bavant, J.-L. Biscop, D. Orssaud, 1980 - Dêhès (Syrie du Nord), Campagnes I-III (1976-1978), Recherches sur l'habitat rural. *Syria* 57: 1-303.

Taeschner, F., 1956 - The Itinerary of the First Persian Campaign of Sultan Süleyman, 1534-36, according to Naşūh al-Maṭrākī. *Imago Mundi* 13: 53-55.

Taeschner, F., 1962 - Das Itinerar des ersten Persienfeldzuges des Sultans Süleyman Kanuni 1534/35 nach Matrakçı Nasuh: Ein Beitrag zur historischen Landeskunde Anatoliens und Nachbargebiete. *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 112: 50-93.

Tate, G., 1992 - *Les campagnes de la Syrie du nord du II<sup>ème</sup> au VII<sup>ème</sup> siècle*, Paris.

Tchalenko, G., 1953 - *Villages antiques de la Syrie du nord*, Paris.

Tonghini, C., 1998 - *Qal'at Ja'bar Pottery: A Study of a Syrian Fortified Site of the late 11th-14th centuries*. Oxford/New York: Oxford University Press.

Venzke, M., 1997 - The Ottoman Tahrir Defterleri and Agricultural Productivity. *Journal of Ottoman Studies* 17: 1-61.

Vorderstrasse, T., 2004 - The Romanization and Christianization of the Antiochene Region. The Material Evidence from Three Sites. In: I. Sandwell and J. Huskinson, eds: *Culture and Society in Later Roman Antioch*, 86-101. Oxford: Oxbow Books.

Vorderstrasse, T., 2005a - *Al-Mina: A Port of Antioch from Late Antiquity to End of the Ottomans*. Leiden: PIHANS 104.

Vorderstrasse, T., 2005b - Coin Circulation in Some Syrian Villages (5<sup>th</sup>-11<sup>th</sup> Centuries). In: J. Lefort, C. Morrisson, and J.-P. Sodini, eds: *Les villages dans l'empire byzantin, IV<sup>e</sup>-XV<sup>e</sup> siècle*, 495-510. Paris: Réalités Byzantines 11.

Vorderstrasse, T., 2005c - The Iconography of the Wine Drinker in Port St. Symeon Ware from the Crusader Era. *Eastern Christian Art* 2: 59-72.

Vorderstrasse, T., 2006 - Archaeology of the Antiochene Region in the Crusader Period. In: K. Ciggaar and M. Metcalf, eds: *East and West in the Medieval Mediterranean I: Antioch from the Byzantine Reconquest until the end of the Crusader Principality: Acta of the Congress held at Hernen Castle in May 2003*, 319-336. Leuven: OLA 147.

Vorderstrasse, T., 2006 - A Countermarked Byzantine coin of Heraclius (610-41) from Tell Kurdu. *The Numismatic Chronicle* 166: 433-438.

Vorderstrasse, T., forthcoming - *Coins from the Plain of Antioch: Catalogue and Circulation Study*.

Vorderstrasse, T., in prep. - *Islamic Glazed Pottery and Glass from the Qoueiq Survey*.

Waagé, F.O., ed., 1948 - *Antioch on-the-Orontes IV. Part One, Ceramics and Islamic Coins*. Princeton.

Watson, O., 1999 - Report on the glazed ceramics. In: P.A. Miglus, ed.: *ar-Raqqa I. Die Frühislamische Keramik von Tall Aswad*, 81-87. Mainz am Rhein: Philipp von Zabern.

Weulersse, J., 1940 - *Le Pays des Alaouites, vol. I*. Tours.

Whitcomb, D., 2000 - Archaeological Research at Hadir Qinnasrin, 1998. *Archéologie Islamique* 10: 7-28.

Whitcomb, D., 2001 - Letters from the Field: In Search of Lost Mar'ash. *The Oriental Institute News and Notes* 171.

Wilkinson, T.J., 1990 - *Town and Country in Southeastern Anatolia, vol 1. Settlement and Land Use at Kurban Höyük and other Sites in the Lower Karababa Basin*. Chicago: Oriental Institute Publications 109.

Wilkinson, T.J., 1997 - The History of the Lake of Antioch: A Preliminary Note, In G. Young, M. Chavalas and R. Averback, eds: *Crossing Boundaries and Linking Horizons: Studies in Honor of Michael C. Astour on his 80<sup>th</sup> Birthday*. Bethesda: CLD Press.

Wilkinson, T.J., 1998 - Water and Human Settlement in the Balikh Valley, Syria: Investigations from 1992-1995. *Journal of Field Archaeology* 25: 63-87.

Wilkinson, T.J. 1999 - Holocene Valley Fills of Southern Turkey and Northwestern Syria: Recent Geoarchaeological Contributions, *Quaternary Science Reviews* 18: 555-571.

Wilkinson, T. J., 2000 - Geoarchaeology of the Amuq Plain. In: K.A. Yener, C. Edens, T.P. Harrison, J. Verstraete and T.J. Wilkinson: *The Amuq Valley Regional Project, 1995-1998*. *American Journal of Archaeology* 104: 163-220.

Wilkinson T.J. and D. J. Tucker, 1995 - *Settlement Development in the North Jazira, Iraq: A Study of the Archaeological Landscape*. Baghdad: British School of Archaeology in Iraq.

Wilkinson, T.J., E.S. Friedman, E.Alp and A.P.J. Stampfl 2001 - The Geoarchaeology of a Lake Basin: Spatial and Chronological Patterning of Sedimentation in the Amuq Plain, Turkey. *Recherches en archéométrie* 1: 211-26.

Will, E., 1997 - Antioche sur l'Oronte, métropole de l'Asie. *Syria* 74: 99-113.

Woolley, L., 1950 - Tell Esh-Sheikh. *American Journal of Archaeology* 54: 64.

Yener, K.A., ed., 2005 – *The Amuq Valley Regional Projects, vol. 1, Surveys in the Plain of Antioch and Orontes Delta, Turkey, 1995-2002*, Chicago: Oriental Institute Publications 131.

Yener, K.A., C. Edens, T.P. Harrison, J. Verstraete and T.J. Wilkinson, 2000a - The Amuq Valley Regional Project, 1995-1998. *American Journal of Archaeology* 104: 163-220.

Yener, K.A., C. Edens, J. Casana, B. Diebold, H. Ekstrom, M. Loyet and R. Özbal, 2000b - Tell Kurdu Excavations 1999. *Anatolica* 26: 32-117.

Yener, K.A. and Wilkinson, T.J. 1998/99 - Amuq Valley Regional Project. *Oriental Institute Annual Report*.

Yurdaydın, H.G., 1976 - *Beyân-i Menazil-i Sefer-i 'Irâķeyn-i Sulţān Süleymān Hān*. Istanbul: Türk Tarih Kurumu.

## Appendix 1

### Fig. 5: Selected ceramics from pre-Bronze Age settlements

1) **AS 349**, dark faced burnished ware, 2.5 YR 4/4, Ø22, 22° (Amuq A or B); 2) **AS 349**, dark faced burnished ware, reddish brown 5YR 5/3 (Amuq A or B); 3) **AS 26**, coarse simple ware, dark gray paste with brown oxidized surfaces, soft common chaff. Ø20 (Amuq A or B); 4) **AS 349**, incised ware 10 YR 6/3 (Amuq A or B); 5) **AS 93**, burnished-incised ware, interior and upper lip area of exterior above the incised portion burnished. Ø15, 10° (Amuq A or B); 6) **AS 349**, coarse simple ware, soft, friable textured unburnished ware, outer surface: 10YR 8/3, inner core: Gley 1 4/N. Ø30, 2° (Amuq A or B); 7) **AS 349**, coarse simple ware, mineral tempered unburnished ware, 10YR 6/3. Ø20, 18° (Amuq A or B); 8) **AS 349**, coarse simple ware, stancing questionable because rim uneven, 10YR 3/1 Ø ca. 44, 2° (Amuq A or B); 9) **AS 26**, coarse simple ware, coarse chaff tempered, core black, some slight mineral inclusions Ø30, 10° (Amuq A or B); 10) **AS 97B**, chaff-faced simple ware straw/chaff tempered, unoxidized core, 2.5 T 7/2, Ø20, 15° (Amuq F) 11) **AS 97B**, chaff-faced simple ware, mineral/chaff tempered plain ware, 7.5 YR 4/2 Ø20, 25° (Amuq F); 12) **AS 97B**, chaff-faced simple ware, black core with orange oxidized surface, exterior: 5YR 7/4, Ø30, 35° (Amuq F); 13) **AS 172**, chaff-faced simple ware, straw-chaff tempered, 10YR 6/4, Ø21, 29° (Amuq F); 14) **AS 97B**, smooth-faced simple ware, mineral tempered, oxidized paste, made on slow wheel. 5YR 7/4, Ø24, 12° (Amuq F); 15) **AS 157**, chaff-faced simple ware, chaff/mineral temper, 10 YR 7/3, Ø30, 17° (Amuq F).

### Fig. 6: Selected ceramics from pre-Bronze Age settlements

1) **AS 168**, monochrome painted ware, mineral temper, reduced, base: 7.5 YR 7/3, paint: 7.5 YR 3/1 Ø30, 36° (Amuq E); 2) **AS 97B**, monochrome painted ware, medium-fine mineral temper, base: 2.5YR 7/3, paint 2.5 YR 4/1, Ø16, 10° (Amuq E); 3) **AS 168**, monochrome painted ware, mineral temper, base: 7.5 YR 7/3, paint: 5YR 2.5/2 (Amuq E); 4) **AS 97B**, monochrome painted ware, mineral temper, base: 2.5 Y 7/3, paint: 2.5 Y 4/1, Ø10, 50° (Amuq E); 5) **AS 97B**, monochrome painted ware, mineral temper, base: 2.5 Y 7/3, paint 2.5 Y 4/1 Ø10, 10° (Amuq E); 6) **AS 168**, monochrome painted ware, mineral temper, base: 5YR 7/4, paint 5YR 2.5/2, Ø24, 47° (Amuq E); 7) **AS 135**, monochrome painted ware, mineral temper, stance questionable because rim chipped, base: 10YR 8/3; paint 7.5 YR 7/2; Ø ca. 26, ca. 8° (Amuq E); 8) **AS 168**, monochrome painted ware, chaff temper, base: 10YR 7/2, paint 5YR 2.5/2, Ø30, 11° (Amuq E); 9) **AS 135**, simple ware, fully reduced mineral temper, 7.5 YR 7/4, Ø30, 25° (Amuq E); 10) **AS 168**, monochrome painted ware, mineral temper, base: 10 YR 7/3, paint: 2.5 YR 3/2, Ø17, 35° (Amuq E); 11) **AS 168**, dark faced burnished ware splayed vessel, 5YR 4/3, Ø32, 12° (Amuq E or earlier); 12) **AS 168**, mineral and chaff tempered plain ware, 7.5 YR 7/4, Ø24, 28° (Amuq E); 13) **AS 168**, mineral and chaff tempered plain ware, 10YR 7/4, Ø21, 18° (Amuq E).

### Fig. 9: Selected ceramics Hellenistic Period settlements

1) **AS 176**, Black Glaze Kantharos with “West Slope” decoration (Rotroff Fig. 15, 204); 2) **AS 28**, Black Glaze Kantharos (Rotroff Fig. 4, 1); 3) **AS 99**, Brown slipped cup (Waagé Pl. II, 75 k); 4) **AS 120**, Red slipped cup (Waagé Pl. II, 77 a); 5) **AS 283**, Red slipped cup (Waagé Pl. III, 79 a); 6) **AS 286**, Red slipped cup (Slane FW 177), 7) **AS 25**, Black slipped cup (Waagé Pl. II, 73); 8) **AS 281**, Brown slipped cup (Waagé Pl. II, 77 f); 9) **AS 91**, Brown slipped cup (Waagé PL. II, 75 p); 10) **AS 278**, Brown slipped cup; 11) **AS 273**, Red slipped cup (Slane TA type 24); 12) **AS 271**, Red slipped cup (Slane FW 187); 13) **AS 267**, Red



slipped cup (Slane TA type 25 a); **14) AS 262**, Red slipped cup (Slane TA type 25 c); **15) AS 264**, Rolled rim black slipped plate; **16) AS 180**, Black slipped fishplate (Waagé Pl.I, 13 f); **17) AS 273**, Brown slipped fishplate.

**Fig. 12: Selected ceramics from Roman Period settlements**

**1) AS 282**, Plate, Eastern Sigillata A (Waagé Pl. III, 116 f); **2) AS 317**, Plate, Eastern Sigillata A (Hayes *Forma* 56); **3) AS 324**, Plate, Eastern Sigillata A (Hayes *Forma* 4); **4) AS 266**, Plate, Eastern Sigillata A (Hayes *Forma* 34); **5) AS 248 Plate**, Eastern Sigillata A (Hayes *Forma* 37 a); **6) AS 272**, Small Plate, Eastern Sigillata A (Waagé Pl. V, 422); **7) AS 270**, Cup, Eastern Sigillata A (Hayes *Forma* 45); **8) AS 227**, Cup, Eastern Sigillata A (Hayes *Forma* 23); **9) AS 36**, Hemispherical Bowl, Eastern Sigillata A (Hayes *Forma* 24); **10) AS 264**, Cup, Eastern Sigillata A (Hayes *Forma* 48); **11) AS 282**, Plate, Eastern Sigillata A (Hayes *Forma* 57); **12) AS 227 Cup**, Eastern Sigillata A (Hayes *Forma* 61); **13) AS 253**, Plate, Eastern Sigillata A (Hayes *Forma Tarda F*); **14) AS 286**, Eastern Sigillata A (Waagé Pl. VII, 635); **15) AS 187**, Eastern Sigillata A (Hayes *Forma* 39); **16) AS 84**, Plate, Eastern Sigillata A (Waagé Pl. IV, 143 f); **17) AS 253**, Cup, Eastern Sigillata B (Hayes *Forma* 29).

**Fig. 14: Selected ceramics Late Roman Period settlements, Hellenistic and Roman plain wares.**

**1) AS 246**, Plate, African Red Slip Form 3; **2) AS 169**, Plate, African Red Slip Form 67; **3) AS 32**, Plate, Late Roman C (Phocaean Ware) Form 3; **4) AS 130**, Plate, Late Roman C (Phocaean Ware) Form 3; **5) AS 99**, Plate, Cypriot Red Slip Ware, Form 1; **6) AS 44**, Plate, African Red Slip Form 104; **7) AS 32**, Bowl, Çandarlı Ware, Form 3; **8) AS 28**, Hellenistic Cooking Ware Jug; **9) AS 253**, Roman Plain Ware jar; **10) AS 28**, Hellenistic Cooking Ware pot; **11) AS 124**, Hellenistic Mortarium; **12) AS 32**, North Syrian Mortarium; **13) AS 110**, Late Roman Jug.

**Fig. 16: Selected ceramics from Early Islamic Period settlements**

**1) AS 4B**, vertical rim brittleware (redware), Ø12 (Mackensen 1984, 11.23, 24.5, 29.5.); **2) AS 344**, vertical rim brittleware (redware), Ø16.5 (Mackensen 1984, 21.4); **3) AS 345**, vertical rim brittleware (redware), Ø9 (Mackensen 1984, 27.15-16); **4) AS 202**, holemouth brittleware (redware), Ø13 (Whitcomb 2000 7.j); **5) AS 25**, holemouth brittleware (redware), Ø25 (Northedge 1988, 42.6, 39.9/10c); **6) AS 41**, holemouth brittleware (redware) (Bartl 1996, 4.5); **7. AS 202**, inverted rim brittleware (redware), Ø17 (Whitcomb 2000, 25.q); **8) AS89**, creamware, Ø8 (Bavant & Orssaud 2001, 4.19); **9) AS89**, creamware, Ø12 (Sack 1996, 52.2); **10) AS122**, creamware, Ø6 (Northedge 1988 40.8-11); **11) AS99**, creamware, Ø10.5 (Whitcomb 2000, 5.d); **12) AS224**, creamware, Ø11 (Whitcomb 2000, 7.n); **13) AS345**, creamware, Ø14 (Bartl 1996, 2.1); **14) AS41**, creamware lid, base Ø5 (Bavant & Orssaud 2001, 8.36-7); **15) AS 29**, Syrian yellowglaze orangeware, base Ø8 (Watson 1999, 19.n, 94.f-i, 95. a-g); **16) AS 29**, Syrian yellowglaze orangeware base Ø9 (Watson 1999, 19.s, 94.f-i, 95.a-g); **17) AS 32**, Syrian yellowglaze orangeware, base Ø10 (Watson 1999, 19.c); **18) AS 32**, colorsplash sgraffiato, Ø15.5 (Vorderstrasse 2005a, C223E.1937, C223F.1937); **19) AS 32**, yellowglaze, Ø23 (Watson 1999 92.k, 97.c).

**Fig. 18: Selected ceramics from Middle and Late Islamic Period settlements**

**1) AS 120**, Splash Ware Sgraffiato; red-brown fabric, medium, moderate; white slip, light yellow glaze; interior, green, yellow-brown, sgraffiato; exterior, yellow-brown; **2) AS 120**, Splash Ware Sgraffiato; red fabric-brown fabric, medium, moderate; white slip, light yellow glaze; interior, green, yellow-brown, sgraffiato; **3) AS 25A**, Raqqa Ware; white fabric, fine,

small temper; interior, white slip, green-blue glaze; **4) AS 108B**, Imitation Raqqa Ware; red-brown fabric; medium, moderate temper; interior, white slip, blue glaze; **5) AS 52A**, Port St. Symeon Ware; Rim too small for radius; white slip, clear glaze going over rim; interior, sgraffiato, green, manganese; **6) AS 25**, Port St. Symeon Ware; red-brown fabric, medium ware, moderate temper; light green glaze; sgraffiato int. and ext.; **7) AS 21**, Ottoman; fine ware, small temper; white glaze; **8) AS 105N**, Pipe; burnished; red fabric; fine, small temper; impressed; **9) AS 52B**, Pipe; burnished; red fabric; fine, small temper; impressed; **10) AS 105A**, Ottoman Rouletted Ware; medium, moderate fabric; buff; ext. rouletted decoration.

## Appendix 2

**Additions and corrections to the Gazetteer of Archaeological Sites** (Casana/Wilkinson 2005b) (information that is unchanged from the gazetteer is not included)

<b>AS 91</b> DATE	<b>Paşa Höyük</b> 2005 collection of field at foot of W side of mound: some Hellenistic, Roman (1st c. BCE-2 <sup>nd</sup> c. CE), abundant Middle and Late Islamic.
<b>AS 96</b> NOTE	<b>Tarfah Höyük</b> Information in Casana/Wilkinson 2005b is correct, but site labelled as AS 96 on fig. A.6. (p. 264) is AS 97. AS 96 lies 200 m to the west.
<b>AS 97</b> AREA DATE DESCRIPTION	<b>Tabarat Tarfah</b> 100 x 100 m Mostly Chalcolithic (Amuq E-F range). Small site 200 m to the east of village of Tarfah (AS 96), completely levelled by bulldozer. Common sherds on the surface of a plowed field. The intact site shows up well on CORONA imagery.
<b>AS 103</b> NOTE	<b>Tabarat Mastepe</b> Casana/Wilkinson 2005b identifies AS 103 with an unvisited anomaly on the CORONA imagery, 1 km to the west of AS 161. Intensive field-walking in this area in 2005 did not demonstrate the presence of a site here. The location of Braidwood's AS 103 is therefore still uncertain.
<b>AS 107</b> AREA DATE DESCRIPTION	<b>Hürriyet Tepe (Tabarat Hürriyet)</b> 100 x 100 x max. 2 m Based on small collection: Hellenistic, Early Roman; possibly some Chalcolithic Low mound with gentle slopes to all sides, completely covered by modern village. There are some cuts into the mound near the summit. Dressed limestone blocks and milling basin on the surface.
<b>AS 109</b> AREA DATE DESCRIPTION	<b>Tell Ibrahimiyah</b> 100 x 200 x max. 2 m Assemblage appears to consist of Late Chalcolithic/Early Bronze Age; scant Late Roman Extensive area of irregular mounding, mostly under cultivation at the time of visit and boundaries impossible to establish.
<b>AS 111</b> DATE DESCRIPTION	<b>Tallat</b> Late Hellenistic, Early Roman (predominantly), Late Roman Extensive area with cultural material at the surface, including large dressed limestone blocks. According to farmers, two mounds here were bulldozed about 15 years previously. The remaining parts of the site(s) are largely under irrigation.

<b>AS 125</b>	<b>Saçaklı</b>
AREA	100 x 100 m
DATE	Bronze Age/Iron Age
DESCRIPTION	Low mound, largely under house, garden plots and road, which have probably significantly landscaped the original mound. Collection was mainly done at the east side of the mound.
<b>AS 138</b>	<b>Tell Saluq</b>
DATE	2005 collection from summit of mound: Late Roman, Early Islamic, much Middle Islamic
<b>AS 157</b>	<b>Ayrancı (Büyük Ayrancı, Batı Ayrancı)</b>
SIZE	(approx.) 100 x 200 m x max. 5 m
DATE	Based on small collection: Late Chalcolithic (Amuq F chaff faced wares). No indication for Hellenistic or later.
DESCRIPTION	Site completely covered by modern village, and visibility for artefacts is poor.
<b>AS 159</b>	<b>Zoba Höyük</b>
SIZE	not measured
DATE	Some Early Roman, predominantly Late Roman, Late Islamic
NOTE	In contrast to the conclusion drawn in the 2005 gazetteer, the site is not located under the modern village but on the hill slope to the east.
DESCRIPTION	Site is situated on a natural hill with olive groves. The extent of the unmounted site is shown only by the scatter of roof tile and sherds, which occur mainly on the northern slopes of the hill. Some dressed limestone blocks on the surface.
<b>AS 168</b>	<b>Karaca Khirbet 'Ali</b>
DATE	2005 collection includes Chalcolithic (Amuq C/D/E) as well as Middle Islamic.
<b>AS 172</b>	<b>Tell Qirmidah (Tell Kirmit)</b>
DATE	2005 collection: Chalcolithic, few Hellenistic/Early Roman, some Late Roman.
<b>AS 204</b>	<b>Harranköy</b>
DATE	2005 collection: Roman, Late Roman, much Early Islamic, some Late Islamic.
<b>AS 205</b>	<b>Cudeidah</b>
DATE	2005 collection: Roman, Late Roman.
<b>AS 222</b>	<b>Konut köy (Vesvese köyü)</b>
DATE	2005 collection: Roman, Late Roman, scanty Early Islamic and Middle Islamic.
<b>AS 254</b>	<b>--</b>
DATE	Hellenistic (abundant), Roman, possible Late Roman, Middle Islamic.

<b>AS 255</b>	<b>Açittepe</b>
DATE	2005 collection (mainly from southern slopes): Hellenistic (beginning in 4th c. BCE), Early Roman, Late Roman, Middle Islamic.
DESCRIPTION	Top of mound is covered by a farmstead under trees, but exposed slopes extend into irrigated fields to the south. Dressed limestone pieces, overfired roof tile wasters on the surface. Farmers show several mold-made figurines and the location in irrigation ditch where they were found.
<b>AS 297</b>	<b>Demirköprü (Gephyra, Jisr Hadid)</b>
DATE	2005 collection from riverbed near Ottoman bridge: Middle and Late Islamic.
NOTE	Casana/Wilkinson 2005b notes that the extent of the ancient settlement is visible on CORONA imagery. Ground-truthing in 2005 was not successful in establishing the location and extent of the settlement, due to modern occupation.
<b>AS 345</b>	<b>Yenişehir (Imma)</b>
DATE	Town center: Late Roman, Early Islamic, scant Middle Islamic. NW outskirts: few Early Roman, common Late Roman, abundant Early Islamic, Middle Islamic.
NOTE	Date in Casana/Wilkinson 2005b based on architectural remains as Late Roman or Late Antique. In 2005 season, collections were done at several open lots around the town. While surveying, the unearthing was observed by a bulldozer for sewage works of very large roughly dress limestone blocks (up to 1.80 x 0.40 x 0.40 m), undoubtedly of a major architectural structure, and a 1.20 m tall cylindrical limestone millstone.
<b>AS 347</b>	--
AREA	150 x 150 m (approx.)
DATE	Hellenistic, Early Roman, some Late Roman, Early/Middle/Late Islamic. Perhaps 1-2 Bronze Age sherds
DESCRIPTION	Flat site without clear boundaries, partly covered by crops at the time of visit.
<b>AS 348</b>	<b>Ağa Çiftliği</b>
AREA	30 x 30 m
DATE	Recent Ottoman
DESCRIPTION	Still occupied farmstead with buildings around a courtyard. An elaborate stone gate building carries an Ottoman inscription. Undated sherds in a garden lot within the compound have been brought in from elsewhere.
<b>AS 349</b>	--
AREA	200 x 200 x max. 2 m
DATE	Neolithic (possibly Amuq A/B burnished bowls), Late Chalcolithic (Amuq F/G, reserved slip, chaff-faced wares); Early Roman

DESCRIPTION	Small site largely under irrigation at the time of visit.
<b>AS 350</b>	--
AREA	70 x 70 m x 1.5 m
DATE	Some Hellenistic, predominantly Early Roman continuing into Late Roman
DESCRIPTION	Small mounded site with gradual slopes, almost completely under cultivation at the time of visit. Extent of the mound established partly on the basis of crop color differences.
<b>AS 351</b>	--
AREA	not measured
DATE	unknown
DESCRIPTION	The site is covered by a walled-in cemetery under trees and only the sites edges were accessible at the time of visit. Scant sherds on the surface but no collection yet.
<b>AS 352</b>	<b>Ceryan Tepe (Azmi Öcal Çiftliği)</b>
AREA	unknown
DATE	Hellenistic, Early Roman, Late Roman, Early Islamic.
DESCRIPTION	Site is completely covered by modern village and extent is unknown. Collections were only made in the courtyard of a farmstead where the inhabitants had unsuccessfully tried to unearth a tree. The pit showed cultural layers including wall foundations to at least 1.5 meters below the surface, and produced ceramics, glass, glass slag and roof tile.
<b>AS 353</b>	--
AREA	75 x 75 x 1.5 m
DATE	Mainly Late Chalcolithic (Amuq F, few painted wares, chaff-faced wares, sand tempered handmade buff wares, no dark faced burnished or unburnished wares); few late Hellenistic or Early Roman sherds
DESCRIPTION	Site has been plowed but was not under cultivation at the time of visit. Some of the top of the low mound appears to have been levelled. Several complete grinding stones on the surface.
<b>AS 354</b>	--
AREA	100 x 100 x 3 m
DATE	In Middle Bronze Age to Iron Age range; very few Early Roman
DESCRIPTION	Roughly circular small mound with gradual slopes to all sides. Partly under irrigation but no signs of severe damage.
<b>AS 355</b>	--
AREA	unknown
DATE	Late Chalcolithic
DESCRIPTION	Site is covered by alluvial or colluvial sediments (at least 0.5m deep) and was observed in the side of a large canal cut. There is human skeletal remains visible in the section, but also common handmade sherds that indicate that the site is probably not only a cemetery.

## List of captions

Fig. 1 The Amuq Valley in southern Turkey, with selected sites and regions mentioned in the text.

Fig. 2 The Amuq Valley and surrounding uplands, showing modern geographical names and sites that were surveyed in 2005.

Fig. 3 The Amuq Valley and surrounding uplands, showing all sites recorded between 1995 and 2005 (After Casana 2003, fig. 1.1, with additions and corrections, see also Appendix 2).

Fig. 4 The Amuq Valley and surrounding uplands, showing sites with evidence for occupation during the Amuq A-E Phases (Late Neolithic, Chalcolithic). Numbered sites are discussed in the text.

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Fig. 16 Ceramics dating from the Early Islamic Period, from selected sites. See Appendix 1 for details.

Fig. 17 The Amuq Valley and surrounding uplands, showing sites with evidence for occupation during the Middle Islamic Period. Numbered sites are discussed in the text.

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Fig. 19 The Amuq Valley and surrounding uplands, showing sites with evidence for occupation during the Late Islamic Period. Numbered sites are discussed in the text.